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JUNE, 1902

BULLETIN

OF THE

UNIVERSITY OF MISSOURI

CATALOGUE

SIXTIETH REPORT OF THE CURATORS TO THE GOVERNOR
OF THE STATE

1901-1902

COLUMBIA, MISSOURI

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as second-class matter.

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"Religion, morality and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged." Ordinance of 1787.

UNIVERSITY OF MISSOURI

CATALOGUE

SIXTIETH REPORT OF THE CURATORS TO THE GOVERNOR
OF THE STATE

1901-1902

COLUMBIA, MISSOURI

Calendar for 1902 and 1903

1902

	S	M	T	W	T	F	S		S	M	T	W	T	F	S		S	M	T	W	T	F	S
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UNIVERSITY CALENDAR

ADDITIONS AND CORRECTIONS

e 31.—For admission to the Academic Department for the session of 1902-3 there may be offered, in addition to the subjects given in the table, one (1) unit in Zoology and Botany combined, one (1) or two (2) units in Physiography, and one (1) or two (2) units in Physiology. In order to be accepted, the work done for these units must have covered as much time and comprised as much laboratory work as is required for units in the other branches of natural science. Note-books must be presented in Zoology and Botany and in Physiology, and maps in Physiography.

In the third column of the table (units required for admission to the Academic Department and the Department of Education) under "Algebra" read 1, not 2. Only one unit in Algebra is required for admission to those Departments in the fall of 1902.

es 52, 58, 115-6.—Teaching Fellowships are abolished by action of the Board of Curators. Graduate Fellowships and Scholarships (the Fellowships not to exceed 10) have been established for the next session.

e 26.—Professor Loeb has been appointed to the chair of Political Science and Public Law, and Assistant Professor Defoe to the chair of Mechanics in the School of Engineering).

e 27.—A chair of History has been established by the Board of Curators.

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June 10, Wednesday.....Commencement

10465

Calendar for 1902 and 1903

1902

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JAN.	5	6	7	8	9	10	11		4	5	6	7	8	9	10		7	8	9	10	11	12	13
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UNIVERSITY CALENDAR

AT COLUMBIA.

- 1902—June 2, Monday.....Summer Session Begins
 September 4, 5, 6, 8.....Entrance Examinations
 September 9, Tuesday.....All Departments Open
 November 26, Wednesday, 4 p. m., to December 1,
 Monday, 8:30 a. m.....Thanksgiving Holidays
 December 16, Tuesday.....Quarterly Meeting of the Curators
 December 23, Tuesday, at 12:30 p. m., to.. } Christmas Holidays
 1903—January 5, Monday, at 8:30 a. m..... }
 January 9, Friday.....Memorial Day
 January 23-31.....Mid-Year Examinations
 February 3, Tuesday.....Second Semester Begins
 April 2.....Quarterly Meeting of the Curators
 May 22 to May 30.....Final Examinations
 May 30, SaturdayStephens Medal Contest
 May 31, Sunday.....Baccalaureate Sermon
 June 1, Monday.....Class Day
 June 2, Tuesday.....Alumni Day
 June 2, Tuesday.....Quarterly Meeting of the Curators
 June 3, Wednesday.....Commencement Day

AT ROLLA.

- 1902—September 15 and 16, Monday and Tuesday,
 9 a. m.....Entrance Examinations
 September 17, Wednesday.....First Term Begins
 October 2.....Quarterly Meeting of the Curators
 November 27, Thursday.....Thanksgiving Holiday
 December 19, Friday, at 12 m.....Christmas Holidays Begin
 1903—January 2, Friday.....Second Term Begins
 March 16, Monday.....Third Term Begins
 June 10, Wednesday.....Commencement

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REPORT OF THE BOARD OF CURATORS

COLUMBIA, Mo., May 1, 1902.

To His Excellency, A. M. DOCKERY, *Governor of Missouri*:

SIR: I have the honor herewith to present the Annual Catalogue of the University of Missouri, giving a review of the work for 1901-1902 and outlining the programme for the scholastic year of 1902-1903.

RESIGNATIONS AND APPOINTMENTS.

At Columbia: In the spring of 1901, but too late to be included in the catalogue for last year, Jesse E. Pope, M. S., was appointed Professor of Economics, Oscar M. Stewart, Ph. D., was appointed Assistant Professor of Physics, and Rolla R. Ramsey, Ph. D., Instructor in Physics, W. W. Griffith having resigned. At the same time H. B. Almstedt, Ph. D., was made Assistant Professor of Germanic Languages. During the summer of 1901, John S. Ankeney, for many years Supervisor of Drawing in the public schools of Kansas City, was appointed Instructor in Drawing. Some time in June, C. H. Eckles, M. Sc., was appointed Professor of Dairy Husbandry. In the latter part of last summer, Richard F. Rand, M. D., was appointed House Surgeon to the Parker Memorial Hospital. In June, Frederick H. Seares, B. S., was made Professor of Astronomy and Charles Thom, Ph. D., was appointed Acting Assistant Professor of Botany for one year. A little later W. S. Williams, C. E., was appointed Instructor in Civil Engineering.

Late in the summer of 1901, Professor C. W. Marx resigned his position as Professor of Mechanical Engineering and Superintendent of the Shops and almost immediately Mr. Sylvanus Carl Shipley resigned his position as Instructor in Mechanic Arts. We were fortunate enough to secure for the current session in place of Mr. Marx, Walter Alexander, M. E., and in place of Mr. Shipley, Earl B. Smith. Neither of these teachers will be with us next year. Our choice for the chair of Mechanical Engineering has fallen upon Arthur M. Greene, Jr., M. E., Instructor in the University of Pennsylvania, and for Instructor in Manual Training with supervision over the Shops we have employed Mr. W. H. Cook, now at the Teachers' College, New York. Late in the fall, Dr. Paul Kaufmann resigned the chair of Pathology and Bacteriology. It proved impossible so late in the year to fill this place in a satisfactory manner this session. We have secured for next session the services of Walter

McNab Miller, M. D., a graduate of the Johns Hopkins University, who has been studying pathology for some years in Europe. Late last fall Mr. W. B. Cady, Assistant in Chemistry to the Experiment Station, resigned his office. The place has not been filled, except temporarily. He was called to a higher position in Michigan. During the fall, Mr. Thomas Isaiah Mairs, Assistant in Agriculture to the Experiment Station, was called to a higher office in the State College of Pennsylvania. We have not been able, hitherto, to fill the place to our satisfaction. Since our last catalogue was printed, Mr. Nathaniel Ogden Booth, Assistant in Horticulture to the Experiment Station, has been promoted to a higher position in New York. Late last fall, Mr. Philip Goulding, our head cataloguer, was called to a higher position in Tennessee. His successor is Mr. Duncan Burnet.

During the current session, Professor John Charles Whitten, Professor Sidney Calvert and Professor John Pickard have been in Europe on furlough. T. C. Johnson, B. S., has occupied the chair of Horticulture in place of Mr. Whitten, very much to our satisfaction. Equally satisfactory has been the service that Dr. P. V. C. Baur has rendered us as substitute for Mr. Pickard in Classical Archæology. Dr. B. B. Turner has supplied the place of Mr. Calvert as Assistant Professor of Chemistry. The three Professors on furlough have been studying most assiduously in various universities in Europe.

The rapid increase in the enrollment of students at Columbia and the fact that the work in the past has been maintained at heavy strain upon the staff of teachers has compelled us to make a number of new appointments. The incumbents will take their seats next fall. In Medicine we have appointed Guy L. Noyes, M. D., Demonstrator in the University of Michigan, Professor of Eye and Ear Diseases. We are now searching diligently for a Professor of Obstetrics and Gynæcology. Assistance is sorely needed for the teaching of Physiology. The growth of the attendance in the School of Engineering has made it necessary that Mechanics and Applied Mathematics be made into a separate chair at an early date. We sorely need an Assistant Professor of Bridge and Railroad Engineering, but lack of money prevents our filling this position at the present time. Next spring if not indeed earlier we shall have to appoint two or three Assistants in Engineering. For several years the annual increase in this Department has been about thirty per cent of the attendance of the year before. In Agriculture we have appointed George M. Tucker, Ph. D., Instructor in Field Crops and Soil Physics. We consider ourselves fortunate in securing his services. Under our elective system, the demand for training in the classics has not declined, but rather has become greater. Therefore, we have been com-

pelled to appoint an Instructor in Greek and Latin. Our choice has fallen upon W. L. Westermann, who will take his doctor's degree at the University of Berlin this summer. Miss Caroline T. Stewart, Ph. D., has been appointed Instructor in Germanic Languages for next year. Miss Stewart is the only American woman that hitherto has taken the degree of Doctor of Philosophy at the University of Berlin. An Assistant may have to be appointed in English. The Curators have decided to appoint an Assistant Professor in History to the end that the work in this important and popular subject may be cared for better and that Professor Loeb may be able to give more time to the teaching of Political Science. An additional Instructor in Mathematics is imperatively demanded. A. B. Coble, Ph. D., has been appointed for next fall. The same is true of Chemistry. The demand there is so great that even with an additional Instructor and an Assistant we shall scarcely be able to supply the needs of our students. Hermann Schlundt, Ph. D., has been made Instructor for next session. The chair of Botany has been filled this spring by the election of B. M. Duggar, Ph. D., of the Bureau of Plant Industry at Washington, D. C. He is to take his seat next fall. The importance of this science in the College of Agriculture as well as in the Academic Department has rendered it almost sinful to postpone longer the appointment. A Professor of Petrology and Economic Geology is sorely needed, but from lack of money we are compelled to postpone this appointment, even at the risk of robbing the students of Missouri of instruction to which they are entitled. The purchase of new books has rendered it indispensable that the library force of Cataloguers be increased.

At Rolla: Dr. Hugo Gottschalk has been absent on furlough for the prosecution of his studies. His place has been acceptably filled by Peter Fireman, Ph. D. During the current session, Professor Elmo G. Harris was called from the chair of Civil Engineering to an Assistant Professorship at the University of Pennsylvania. E. J. McCaustland has been appointed to the vacancy. He in turn has been made Assistant Professor at Cornell for next fall. The Geological Survey has been removed from Jefferson City to Rolla in accordance with the will of the Forty-first General Assembly. The Survey has been lodged in fairly good temporary quarters.

Contracts have been let for all the buildings provided for by the Forty-first General Assembly, at Columbia. A description of these buildings would be tedious to your Excellency. Some of the buildings provided for by the last Legislature at Rolla are approaching completion. Much needed and important additions to the Chemical Laboratory have been made. One story has been added to the main building and two

wings, making the structure very presentable to view and admirably suited to the purposes required. The Mechanical building will soon be ready for use, while contracts for heating and rendering all our plant quite serviceable, have been let. The whole will be complete and in condition for work by the opening of the next session. The new building for which fifty thousand dollars was appropriated by the Legislature, has not been commenced, as I learn that the full amount of the appropriation made for its erection is not available. This will delay our purpose to push forward the work during the present season. Plans have been prepared, and accepted by the Executive Committee, but contracts can not be let until the committee has been assured by the authorities that the money can be secured to carry out the undertaking.

THE FACULTY.

Salaries. In administering the affairs of the University one aspect challenges the most serious consideration. Changes in the Faculty are to be avoided, and should never take place unless for reasons the most cogent in their character. Changes are often inevitable because of our inability to retain in the service of the University the best qualified workers of the times. Other and more favored institutions, with ample resources at command, take from us our experienced, thoroughly trained men. The loss thus sustained is incalculable. The retention of such competent and valuable men is all-important. Unless ample provision is made to meet such needs we shall suffer additional losses. Enlarged resources should be placed at the command of the Board, enabling us to compete with any institution in the country in securing and retaining the best talent for University work. This view has special reference to the salaries of head Professors. A great state like Missouri can not afford to cripple the work of its University or minify the opportunity of the youth of the commonwealth. In meeting the wants here indicated, and supplying in the Faculty ability representative of the age, we can attract the young men of Missouri to the University and prevent them from leaving home to find higher advantages elsewhere. The above views are commended to the attention of the people of Missouri and its Legislature.

The salaries paid in our University are as low as the lowest paid in any University of foremost reputation in the country, while the stronger State Universities all pay larger salaries. If we are to retain our best Professors it is necessary that they should receive somewhat larger salaries. It is idle to say that good men are easy to get. Experience shows that it is very hard to get thoroughly good men. Every time that a good Professor leaves, an immense risk is incurred of getting a weaker

man in his place. It is wise policy when you have secured a thoroughly good Professor to hold him if two or three hundred dollars more of salary will do it.

Harmony. The faculties at Columbia (the same is also true at Rolla) are more harmonious than they have ever been in the history of the University. Teachers and officers are working in sympathy for the advancement of the institution. This is no small thing.

THE STUDENTS.

Discipline. The discipline in the session of 1901-1902 has been remarkably good, at Columbia and at Rolla.

Paying One's Own Way. A number of students manage to pay their own way at the University by their own exertions. Some of the most distinguished men in Missouri and other states have done this in former years. The number of such students in the present session (1901-1902) is larger than ever before in the history of the University. The Y. M. C. A., a student organization, has appointed a committee to canvass the town for work and distribute it among students needing it. Too much praise can not be given for the encouragement which this body of Christian students and the teachers and officers of the University have given to poor young men in supporting themselves by their own labors.

Co-operative Book Store. To protect the students from unreasonable charges for books, stationery, etc., the University has established in two rooms of the Academic Hall a Co-operative Store. Students keep this store, receiving for their services very small salaries. The profits are divided among the purchasers. No one receives any profit except he be a purchaser in the store and his profit is in proportion to his purchase. The store sells to the University people only, refusing to sell to the people of the town. It has saved the students in the present session a large sum of money. It was established with the consent of the Curators and has been heartily commended by the Board of Visitors.

Increased Enrollment. The enrollment in the Departments at Columbia (and also at Rolla) is much larger in the session of 1901-1902 than it has ever been (at either place) in the history of the University. The enrollment at Columbia has reached in this session 1,476 students while that at Rolla has reached 191, making a total in the whole University of 1,667. The students come from many states, territories, and foreign countries.

Missouri Students in Other States. Being curious to know to what extent Missouri students are being educated in other states the Registrar of the University ascertained the attendance from Missouri at the following institutions—Harvard, Yale, Chicago University, Columbia, Cornell,

Princeton, Johns Hopkins, University of Virginia, Washington and Lee, Vanderbilt, the Universities of Texas, Kansas, Nebraska, Wisconsin, Michigan, and at Vassar, Wellesley, Bryn Mawr, Smith, and Monticello Colleges. This makes a total of twenty institutions. Six hundred Missourians, men and women, were found in these twenty institutions. It is fair to suppose that there are perhaps as many more Missourians in other institutions which the Registrar has not examined. Let us be modest and say there are four hundred more in all the institutions not above enumerated in other states. This makes a total of a thousand. Now most of these institutions are expensive. It is fair to say that on an average each of these students is spending \$500 a year outside of Missouri. This is half a million a year or for the biennial period one million dollars of Missouri money spent at institutions in other states. The State has at some periods in the past (not in this biennial period) pursued the suicidal policy of starving her own University and forcing her students over the State line for the education that they should receive at home.

On the other hand Michigan has fostered her University from its foundation to the present time. There are enrolled at Ann Arbor from other states fifteen hundred students. It is fair to suppose that each of these students spends in Michigan at least \$333 a year for tuition, clothes, board, incidental expenses, books, and other student supplies. It will be seen that the fifteen hundred students from other states bring to Michigan half a million dollars a year. Michigan levies for her University each year two and one-half cents on every hundred dollars or five cents a hundred dollars for the biennial period. If Missouri taxed herself at the same rate this would produce (on an assessed valuation of one billion two hundred million dollars) six hundred thousand dollars for the biennial period. Michigan provides richly for her University and therefore brings from other states a half million dollars a year. Missouri has often provided for her University inadequately, thus forcing her people to pay other states for the education of her children half a million a year. The difference between the two systems is a million a year or two millions for a biennial period.

PARKER MEMORIAL HOSPITAL.

The Parker Memorial Hospital has been opened. It has a few patients. It is indispensable as a laboratory of clinics for the Medical Department. We begged the last General Assembly for \$10,000 with which to provide the Hospital with plumbing and steam heat, furniture and scientific equipment. Experience has proved that \$12,000 were required. The General Assembly gave us only \$6,000. The Hospital, there-

fore, has entailed upon the University a loss of more than \$4,000 in this biennial period. We have every reason to believe, however, that it has saved the life of more than one student in the present session. Every citizen would think the Hospital a noble institution if he were the father of a student whose life it had saved.

THE COLLEGE OF AGRICULTURE AND THE EXPERIMENT STATION.

This division of the University seems to be growing steadily in favor with the people. In spite of a sharp raise in the standard of admission to the courses in Agriculture and in Mechanic Arts there has been no diminution in our numbers.

The investigations made by the Experiment Station in Agriculture, Agricultural Chemistry, Horticulture, Veterinary Science, and Entomology are of large economic importance and have attracted wide attention from practical and from scientific men. It has been the policy of the Station to confine its work to three principal lines of agricultural activity in this State, viz., Live Stock Husbandry, Dairy Husbandry, and Horticulture. The results of these experiments are published from time to time in the form of Bulletins and distributed, free of charge, to all interested in the work. The demand for these Bulletins has continued to increase. The results of the investigations made here in inoculating against Texas fever have opened, at advanced prices to the breeders of fine cattle in Missouri, a new market embracing the southern third of the United States. Already the officers of this Station have inoculated a large number of pedigreed cattle to be sent into this fever district. The loss from fever was formerly from 40 to 80 per cent but has averaged less than 7 per cent under the process of inoculation.

Through the assistance of the United States Department of Agriculture, the feasibility of storing water in surface ponds or reservoirs to be used for irrigation purposes in times of drouth will be fully tested here. A reservoir holding a million and a half gallons of water has been constructed on the Experimental Farm. The crops to be experimented upon are corn, meadow and pasture grasses, small fruits, and vegetables.

The College Farm, entirely separate from the Experiment Station and used exclusively for instructional purposes, has improved its equipment in blooded stock, has cleared and seeded to grass several hundred acres of pasture, and improved its fields and pastures, all out of its own earnings.

The co-operation between the United States Government and the College of Agriculture and Experiment Station in the management of the

State Weather service has been continued with profit to our students, to the State Board of Agriculture, and to the farmers of Missouri.

THE UNIVERSITY AND THE PUBLIC SCHOOLS.

Summer Session. The Summer Session opens early in June and continues for twelve weeks. It is intended primarily for High School teachers. During the past summer, courses in English, Latin, French, German, Greek, History, Biology, Physics, Chemistry, Shopwork and Drawing, Agriculture, Horticulture, and Mathematics were given. It is gratifying to know that this school is growing in favor year by year and that many of the leading teachers of the State have been among its students. In the summer of 1900 the enrollment was 507. Ours was the fourth largest summer school in America.

Approved Schools. In 1891, there were twenty-three (23) on the list of "Approved Schools." There are now 110 and the list is growing. There are nearly one hundred (100) schools applying for admission to this list. Nine-tenths of these Approved Schools are public High Schools. With the growth of these schools in number and in quality has come a corresponding growth in enrollment. Many of them have increased their enrollment a hundred per cent in the last six years. It is fair to assert that five times as many students were enrolled in our public High Schools in 1901 as were enrolled in 1891; and furthermore the High Schools in which they were enrolled in 1901 were far better than those of 1891. It should be remembered that this marvelous growth of High Schools has been largely the work of the University, whose influence should not be measured by its own enrollment but by what it has done for the public schools as well. Tens of thousands of students that do not come to the University are receiving a far better education than would have been possible had not the influence of the University reached the local High Schools. Through the High Schools to reach for good the District Schools is the next step forward.

THE SCHOOL OF MINES AND METALLURGY.

(at Rolla.)

This branch of the University has had a most successful year. It has a larger enrollment and a better average grade of students than it has ever had in its history. The interest in it of the people and of the press of the State is rapidly growing. Prospectors have sent to its Professor of Geology, during the past calendar year, many thousand specimens of minerals and ores for analysis and identification. That such a school is

justified in a great mining State like Missouri has become apparent, and its friends are to be congratulated upon the fact that it is now becoming one of the leading institutions of its kind in America.

Very respectfully yours,

JOHN D. VINCIL,

President of the Board of Curators.

CORPORATION

THE BOARD OF CURATORS.

JOHN D. VINCIL, St. Louis.....	} Term expires Jan. 1, 1903.
ROBERT B. OLIVER, Cape Girardeau.....	
CAMPBELL WELLS, Platte City.....	
WALTER WILLIAMS, Columbia.....	} Term expires Jan. 1, 1905.
J. F. GMELICH, Boonville.....	
D. A. McMILLAN, Mexico.....	
GARDINER LATHROP, Kansas City.....	} Term expires Jan. 1, 1907.
ARCHIBALD McVEY, Chillicothe.....	
B. G. THURMAN, Lamar.....	

OFFICERS OF THE BOARD.

JOHN D. VINCIL.....	President
GARDINER LATHROP	Vice-President
J. B. BABB,	R. B. PRICE,
Secretary.	Treasurer.

THE EXECUTIVE BOARD AT COLUMBIA.

WALTER WILLIAMS, Chairman.....	Columbia
CAMPBELL WELLS	Platte City
J. F. GMELICH	Boonville

THE EXECUTIVE COMMITTEE OF THE SCHOOL OF MINES.

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FACULTY OF THE UNIVERSITY

Names are printed in order of appointment, except that of the President.

Those marked with a [*] are names of officers or members of the Faculty of the School of Mines and Metallurgy at Rolla, Missouri.

RICHARD HENRY JESSE, LL. D.,

President and Professor of Ancient and Mediæval History.

Student at University of Virginia, 1873-5 and part of 1878; Dean of the Academic Department, University of Louisiana, 1878-84; Professor of Latin, Tulane University, 1884-91; studied in Europe part of 1885 and 1890; LL. D., Tulane University, 1891; President of the University of Missouri, 1891—.

PAUL SCHWEITZER, Ph. D., LL. D.,

Professor of Agricultural Chemistry, and Chemist to the Experiment Station.

Student under Schneider, Sonnenschein and H. Rose at Berlin, 1858-60; Chemist to the Soda Ash Works, Schoeningen, 1860-2; Chemist to the Chemical Works at Detmold, 1862-3; Assistant Professor of Chemistry, Polytechnic Institute, Philadelphia, 1864-6; Assistant in School of Mines, Columbia College, 1866-72; Ph. D., University of Goettingen, 1869; LL. D., University of Missouri, 1897; Professor in the University of Missouri, 1872—.

ANDREW WALKER McALESTER, A. B., M. D., LL. D.,

Professor of Surgery, Dean of the Medical Faculty and Superintendent of the Parker Memorial Hospital.

A. B., University of Missouri, 1865, M. D., 1866, A. M., 1868; studied abroad in 1873 and 1885; Professor of Surgery, 1873-80; LL. D., University of Missouri, 1897; Professor of Surgery and Dean of the Medical Faculty, 1880—.

WOODSON MOSS, M. D., LL. D.,

Professor of the Practice of Medicine and Therapeutics.

M. D., University of Missouri, 1874; Instructor in Medicine and Demonstrator of Anatomy, 1875-8; Professor of Anatomy and Demonstrator, 1878-83; Professor of Anatomy and Physiology, 1883-91; studied in Europe, 1890; Professor of Anatomy and the Practice of Medicine, 1891-1900; LL. D., 1901; Professor of the Practice of Medicine, 1900—.

JOHN CARLETON JONES, A. B., Ph. D.,

Professor of Latin Language and Literature, and Dean of the Academic Faculty.

A. B., Westminster College, 1879, A. M., 1882, Ph. D., 1891; Professor of Latin, Westminster College, 1880-2; Graduate Student at Johns Hopkins University, 1882-3; Assistant Professor of Latin and Greek, University of Missouri, 1883-7; Associate Professor of Latin, 1887-91; Student at University of Leipzig and at Rome, 1895-6; Professor of Latin, University of Missouri, 1891—; Dean of Academic Faculty, 1900—.

EDWARD ARCHIBALD ALLEN, Litt. D.,

Professor of English Language and Literature.

Student at Randolph-Macon College, 1861-2; Student at University of Virginia, 1866-8; Professor of Latin and Greek, Farmville College (Va.), 1873-81; Professor of English and Modern Languages, Central College, 1881-5; Litt. D., Washington and Lee University, 1890; Professor of English, University of Missouri, 1885—.

HENRY CAPLES PENN, A. B., A. M.,

Assistant Professor of English Language and Literature.

A. B., Central College, 1885; Instructor in Latin, Greek, and English, Hendrix College (Arkansas), 1885-7; Student at Harvard University, 1892-4; A. M., Harvard University, 1893; Assistant Professor of English, University of Missouri, 1887—.

JAMES AULL YANTIS, LL. B.,

Professor of Law.

LL. B., University of Missouri, 1875; Professor of Law, 1887—.

MILLARD LEWIS LIPSCOMB, A. M.,

Professor of Physics.

A. M., Bethany College (West Va.), 1874; Instructor in William and Mary College, 1874-5; Professor in William and Mary College, 1875; Professor of Physical Science, South Kentucky College, 1879-89; Professor of Physics, University of Missouri, 1889—.

ALEXANDER MARTIN, A. B., LL. D.,

Professor of Law and Dean of the Law Faculty.

A. B., University of Michigan, 1855, A. M., 1858; LL. B., Harvard University, 1858; LL. D., University of Missouri, 1890; Professor of Law and Dean of the Law Faculty, 1889—.

WILLIAM GWATHMEY MANLY, A. M.,

Professor of Greek Language and Literature.

Student at University of Virginia, 1882-4; Assistant Head Master, McCabe's University School, 1884-6; Professor of Greek, Mercer University, 1886-9; A. M., Harvard University, 1890; American School for Classical Studies at Athens, and travelling in Greece, 1900-1901; Professor of Greek, University of Missouri, 1890—.

JOHN WALDO CONNAWAY, D. V. S., M. D.,

Professor of Comparative Medicine and Veterinarian to the Experiment Station.

D. V. S., University of Missouri, 1890, M. D., 1891; Student at Johns Hopkins University, 1894-5; Professor of Physiology, University of Missouri, 1891-7; Professor of Physiology and Veterinarian to the Experiment Station, 1897-1900; Professor of Comparative Medicine and Veterinarian to the Experiment Station, 1900—.

JOHN DAVISON LAWSON, B. C. L., LL. D.,

Professor of Law.

B. C. L., Trinity College, 1875; LL. D., University of Missouri, 1892; Editor *Central Law Journal*, St. Louis, 1876-81; Practiced Law in St. Louis, 1876-85; Judge of Civil Court, New Jersey, 1886-91; Professor of Law, University of Missouri, 1891—.

†JOHN PICKARD, A. B., Ph. D.,

Professor of Classical Archæology and History of Art, and Curator of the Museum of Classical Archæology.

A. B., Dartmouth College, 1883, A. M., 1886; Student at the University of Leipzig, 1889, University of Berlin, 1890, 1895; in the American School of Classical Studies at Athens, 1890-1; at University of Munich, 1891-2; Ph. D., University of Munich, 1892; Professor of Classical Archæology, University of Missouri, 1892—.

FRANK THILLY, A. B., Ph. D.,

Professor of Philosophy.

A. B., University of Cincinnati, 1887; Student at the University of Berlin, 1887-9; Student at the University of Heidelberg, 1889-91; A. M., Ph. D., University of Heidelberg, 1891; Fellow in Philosophy, Cornell University, 1891-2; Instructor in Logic and the History of Philosophy, Cornell University, 1892-3; Professor of Philosophy, University of Missouri, 1893—.

LUTHER MARION DEFOE, A. B.,

Assistant Professor of Mathematics.

Fellow in Mathematics, University of Missouri, 1891-2; A. B., Harvard University, 1893; Acting Professor of Mathematics, University of Missouri, 1893-4; Assistant Professor of Mathematics, 1894-7; Acting Professor of Mathematics, 1897-8; Assistant Professor of Mathematics, 1898—.

†JOHN CHARLES WHITTEN, B. S., M. S.,

Professor of Horticulture and Horticulturist to the Experiment Station.

B. S., South Dakota Agricultural College, 1891, M. S., 1899; Instructor in Horticulture and Horticulturist to the Experiment Station, South Dakota Agricultural College, 1892; Student at Cornell University,

†Absent during session of 1901-2.

1892; Assistant in Horticulture, Missouri Botanical Garden, 1893-4; Professor of Horticulture and Horticulturist to the Experiment Station, University of Missouri, 1894—.

†SIDNEY CALVERT, B. Sc., A. M.,

Assistant Professor of Chemistry.

B. Sc., McGill University, 1890; Graduate Student, Harvard University, 1890-4; A. M., 1892; Assistant in Chemistry, Harvard University, 1892-4; Private Research Assistant, 1892-4; Assistant Professor of Chemistry, University of Missouri, 1894—.

HENRY JACKSON WATERS, B. S. A.,

Dean of the College of Agriculture and Mechanic Arts, and Director of the Experiment Station.

B. S. A., University of Missouri, 1886; Assistant Secretary, Missouri State Board of Agriculture, 1886-8; Assistant in Agriculture to the Missouri Experiment Station, 1888-91; Professor of Agriculture in the Pennsylvania State College and Agriculturist to the Experiment Station, 1892-5; Dean of the College of Agriculture and Mechanic Arts, and Director of the Experiment Station, University of Missouri, 1895—.

ISIDOR LOEB, M. S., LL. B., Ph. D.,

Professor of History and Administration.

B. S., University of Missouri, 1887; M. S., LL. B., 1893; Tutor in History, 1892-4; University Fellow in Jurisprudence in Columbia University, 1894-5; Assistant Professor of History, University of Missouri, 1895-9; Student at the University of Berlin, 1899-1900; Professor of History, University of Missouri, 1899-1901; Ph. D., Columbia University, 1901; Professor of History and Administration, University of Missouri, 1901—.

BENJAMIN FRANKLIN HOFFMAN, B. L., M. L.,

Professor of Germanic Languages.

B. L., University of Missouri, 1884, M. L., 1888; Assistant Professor of Modern Languages, 1887-92; Student in Paris and Munich, 1892-3; Professor of Modern Languages, University of Louisiana, 1893-5; Student at the University of Chicago, Summer Session, 1895, 1896; Professor of Germanic Languages, University of Missouri, 1895—.

FREDERICK BLACKMAR MUMFORD, M. S.,

Professor of Agriculture, and Curator of the Agricultural Museum.

B. S., Michigan Agricultural College, 1891, M. S., 1893; Assistant in Michigan Agricultural Experiment Station, 1891-5; Assistant Professor of Agriculture, Michigan Agricultural College, 1893-5; Student at the University of Leipzig, 1900, Zurich, 1901; Professor of Agriculture, University of Missouri, 1895—.

†Absent during session of 1901-2.

HENRY MARVIN BELDEN, A. B., Ph. D.,

Assistant Professor of English.

A. B., Trinity College, 1888; Ph. D., Johns Hopkins University, 1895; Instructor in English, Lehigh University, 1890-1, University of Nebraska, 1893-4; Student, University of Strassburg, 1894-5; Assistant Professor of English, University of Missouri, 1895—.

JOHN MOORE STEDMAN, B. Sc.,

Professor of Entomology and Entomologist to the Experiment Station.

B. Sc., Cornell University, 1888; Instructor in Invertebrate Zoology and Entomology, Cornell University, and Entomologist to the Experiment Station, 1888-90; Biologist to the United States Department of Agriculture, 1890-1; Professor of Biology, Trinity College, 1891-3; Professor of Biology, Alabama Polytechnic Institute, Agricultural and Mechanical College, and Biologist to the Experiment Station, 1893-5; Professor of Entomology, University of Missouri, and Entomologist to the Experiment Station, 1895—.

RAYMOND WEEKS, A. B., Ph. D.,

Professor of Romance Languages.

A. B., Harvard University, 1890, A. M., 1891; Instructor in French, University of Michigan, 1891-3; Traveling Fellow to Harvard University (Paris and Berlin), 1893-5; Ph. D., Harvard, 1897; Professor of Romance Languages, University of Missouri, 1895—.

WILLIAM GEORGE BROWN, B. S., Ph. D.,

Professor of Chemistry.

B. S., University of Virginia, 1877; Professor of Chemistry, University of Tennessee, 1877-83; Student in Heidelberg, 1880-1; Instructor in Chemistry, University of Virginia, 1883-5; Morgan Fellow, Harvard University, 1884; Professor of Chemistry and Physics, South Carolina Military Academy, 1885-6; Professor of Chemistry, Washington and Lee University, 1886-94; Ph. D. (Hon.), University of North Carolina, 1889; Assistant Chemist, U. S. Department of Agriculture, 1894-6; Professor of Chemistry, University of Missouri, 1896—.

JOHN RUTLEDGE SCOTT, A. B., A. M.,

Professor of Elocution.

A. B., Ohio University, 1864, A. M., 1867; studied with James E. Murdoch, May-July, 1871; Instructor in Elocution, Washington University, 1877-88; Instructor in Vocal Culture, Johns Hopkins University, 1893-7; Professor of Elocution, University of Missouri, 1897—.

HOWARD BURTON SHAW, B. C. E., A. M.,

Professor of Electrical Engineering.

A. B., University of North Carolina, 1890, B. C. E., 1891; Instructor in Mathematics, University of North Carolina, 1889-90, and Instructor in Mathematics, Surveying, and Drawing, 1891-3; in Engineering Work with Phoenix Iron Company, 1892; A. M., Harvard University, 1894; Assistant in Electrical Engineering Laboratory, Lawrence Scientific School, Har-

vard University, 1894-6; in Engineering Work with Consolidated Traction Company, 1896; Assistant Professor of Electrical Engineering, University of Missouri, 1896-9; Professor of Electrical Engineering, 1899—.

CURTIS FLETCHER MARBUT, B. S., A. M.,

Professor of Geology and Mineralogy and Curator of Geological Museum.

B. S., University of Missouri, 1889; Student at Harvard University, 1893-5; A. M., Harvard University, 1894; Instructor in Geology and Mineralogy, University of Missouri, 1895-7; Assistant Professor of Geology and Mineralogy, 1897-9; studied in Europe, 1899-1900; Professor of Geology and Mineralogy, University of Missouri, 1899—.

*GEORGE EDGAR LADD, A. B., Ph. D.,

Director of School of Mines and Metallurgy and Professor of Geology and Mining.

A. B., Harvard University, 1887, A. M., 1888, Ph. D., 1894; Assistant in Geological Department, 1891-3; Instructor in Geological Department, Summer School, 1892-3, 1896-7; Assistant, United States Geological Survey, 1887-9; Assistant Geologist, Geological Survey of Texas, May, 1889, to December, 1889; Chief Assistant, Geological Survey of Missouri, December, 1889, to September, 1891; Student at German Universities, 1894-5; Chemist and Assistant Geologist, Geological Survey of Georgia, 1896-7; Director and Professor of Geology and Mining, University of Missouri (School of Mines), 1897—.

*GEORGE REINALD DEAN, B. S., C. E.,

Professor of Mathematics.

C. E., University of Missouri (School of Mines), 1890, B. S., 1891; Assistant in Mathematics, 1890-91; Professor of Mathematics, Maryville Seminary, 1891-2; Professor of Mathematics, Coe College, Cedar Rapids, Iowa, 1892-3; Assistant in Leander McCormick Observatory, University of Virginia, 1893-4; Teacher of Mathematics, Central High School, Kansas City, Mo., 1894-7; Professor of Mathematics University of Missouri (School of Mines), 1897—.

JOHN NELSON FELLOWS, A. M.,

Professor of Mathematics.

B. S., University of Missouri, 1892, M. S., 1893; Student in Harvard University, 1893-5; A. M., Harvard University, 1894; Student in University of Goettingen, 1895-6; Professor of Mathematics and Physics, Peekskill Military College, 1896-8; Professor of Mathematics, University of Missouri, 1898—.

JOSEPH MARTIN WHITE, A. B., A. M.,

Professor of Pedagogy.

Graduate of Kirksville Normal School, 1874; Superintendent of the Louisiana (Mo.), Schools, 1875-7, of the Carrollton Schools, 1878; A. B., University of Michigan, 1881, A. M. (Hon.), 1901; Superintendent of the Carthage Schools, 1885-95; School Examiner for the University of Missouri, 1897-9; Professor of Pedagogy, 1899—.

*AUSTIN LEE McRAE, B. S., S. D.,

Professor of Physics.

B. S., University of Georgia, 1881; S. D., Harvard University, 1886; U. S. Signal Service (Electrical Work), 1882; U. S. Signal Service (Missouri State Weather Service), and Assistant Professor of Physics, University of Missouri, 1889-91; Professor of Physics, University of Missouri (School of Mines), 1891-4; Associate Professor of Physics, University of Texas, 1894-6; Consulting Engineer, St. Louis, 1896-9; Professor of Physics, University of Missouri (School of Mines), 1899—.

GEORGE LEFEVRE, A. B., Ph. D.,

Professor of Zoology and Curator of Zoological Museum.

A. B., Johns Hopkins University, 1891; Fellow, 1894-5; Bruce Fellow, 1895-7; Ph. D., 1896; Assistant in Zoology and Embryology, Johns Hopkins University, 1897-8; Instructor in Zoology, Marine Biological Laboratory, Woods Hole, Mass., 1898-1900; Professor of Zoology, University of Missouri, 1899—.

CLARENCE MARTIN JACKSON, B. S., M. S., M. D.,

Assistant Professor (in charge) of Anatomy and Histology.

B. S., University of Missouri, 1898; M. S., 1899; M. D., 1900; Fellow in Biology, 1897-9; Instructor in Anatomy, 1899-1900; Assistant Professor of Anatomy and Histology, 1900—.

EVA JOHNSTON, A. M.,

Assistant Professor of Latin.

Fellow in Latin, University of Missouri, 1894-6; A. M., 1895; Instructor in Latin and Greek, Columbia High School, 1896-9; Student in the Universities of Berlin and Heidelberg, 1899-1901; Assistant Professor of Latin, University of Missouri, 1899—.

CHARLES A. ELLWOOD, Ph. B., Ph. D.,

Professor of Sociology.

Ph. B., Cornell University, 1896; Graduate Student, University of Chicago, 1896-7, 1898-9; Student in University of Berlin, 1897-8; Fellow in Sociology, University of Chicago, 1898-9; Ph. D., 1899; General Secretary of the Charity Organization Society of Lincoln, Nebraska, 1899-1900; Instructor in Sociology, University of Nebraska, 1899-1900; Professor of Sociology, University of Missouri, 1900—.

CHARLES WILSON GREENE, A. B., Ph. D.,

Professor of Physiology and Pharmacology.

A. B., Leland Stanford Jr. University, 1892, A. M., 1893; Ph. D., Johns Hopkins University, 1898; Instructor in Zoology, Marine Biological Laboratory, Woods Hole, Mass., 1896, 1897; Fellow in Physiology, Johns Hopkins University, 1897-8; Assistant Professor of Physiology, Leland Stanford Jr. University, 1898-1900; Professor of Physiology and Pharmacology, University of Missouri, 1900—.

RALPH EMERSON BASSETT, A. B., A. M.,

Assistant Professor of Romance Languages.

A. B., Harvard University, 1889, A. M., 1890; Master in Modern Languages, Belmont School, Mass., 1890-2; Instructor in French and German, De Pauw University, 1892-3; Student of Romance Languages and Philology, Paris, 1893-4; Acting Professor of Modern Languages, College of Charleston (S. C.), 1895-7; Instructor in Romance Languages, Syracuse University (N. Y.), 1897-9; Instructor in Romance Languages, College for Women of Western Reserve University, 1899-1900; Assistant Professor of Romance Languages, University of Missouri, 1900—.

MAX MEYER, Ph. D.,

Professor of Experimental Psychology.

Ph. D., University of Berlin, 1896; Research Work, Psychological Laboratory, University of Berlin, 1896-8; Research Work, Clark University, 1899-1900; Professor of Experimental Psychology, University of Missouri, 1900—.

CLARK WILSON HETHERINGTON, A. B.,

Professor of Physical Training and Director of Gymnasiums and Athletics.

A. B., Leland Stanford Jr. University, 1895; Instructor, Encina Gymnasium, Stanford University, 1893-6; Anthropologist and Director of Physical Training, Whittier State School, 1896-8; Fellow in Psychology, Clark University, 1898-9; Fellow and Assistant in Psychology, Clark University, 1899-1900; Professor of Physical Training and Director of Gymnasiums and Athletics, University of Missouri, 1900—.

FREDERICK PUTNAM SPALDING, C. E.,

Professor of Civil Engineering.

C. E., Lehigh University, 1880; Member of Engineer Corps of the Southern Pacific Railway, 1880-82; Assistant Engineer, Mississippi River Improvements, 1882-6 and 1888-90; Instructor in Civil Engineering, Lehigh University, 1886-8; Engineer in Charge of Street Extensions, Washington, D. C., 1890-1; Assistant Professor of Civil Engineering, Cornell University, 1891-8; Contracting Engineer, Bethlehem, Pa., 1898-1900; Professor of Civil Engineering, University of Missouri, 1900—.

PAUL BAUR, B. L., A. M., Ph. D.,

Acting Professor of Classical Archaeology and the History of Art.

B. L., University of Cincinnati, 1894; Student of the University of Tuebingen, 1894-5; University of Berlin, 1895-7; in the American School of Classical Studies at Athens, 1897-9; at the University of Heidelberg, 1899-1900; A. M., Ph. D., University of Heidelberg, 1900; Lecturer on Classical Archaeology, University of Cincinnati, 1901; Acting Professor of Classical Archaeology and the History of Art, University of Missouri, 1901-2.

CHARLES THOM, A. B., Ph. D.,

Acting Assistant Professor (in charge) of Botany.

A. B., Lake Forest University, 1895, A. M., 1897; Marine Biological Laboratory, 1897; Instructor in Biology, University of Missouri, 1897-9, Ph. D., 1899, Instructor (in charge) in Botany, 1900-1; Acting Assistant Professor (in charge) of Botany, 1901-2.

*†VICTOR HUGO GOTTSCHALK, B. S., M. S.,

Professor of Chemistry.

B. S., University of Missouri (School of Mines), 1898; Assistant U. S. Assayer, Kansas City, Mo., 1898-9; Assistant in Chemical Department, Marion Sims Medical College, 1899; Assistant in Chemistry, University of Missouri (School of Mines), 1899-1900; Instructor in Chemistry, 1900-1, Professor of Chemistry, 1901—.

HERMANN BENJAMIN ALMSTEDT, B. L., Ph. D.,

Assistant Professor of Germanic Languages.

B. L., B. P., University of Missouri, 1895, Ph. D., University of Chicago, 1900; Reader in German, University of Chicago, 1895-98, Assistant, 1898-1900, Associate, 1900-1, Dean in University College (College for Teachers), 1900-1; studied in Germany, 1897; Assistant Professor of Germanic Languages, University of Missouri, 1901—.

JESSE ELIPHALET POPE, M. S.,

Professor of Economics and Finance.

B. S., University of Minnesota, 1895, M. S., 1897; Superintendent of Monticello Schools, 1896-7; Instructor in History, University of Minnesota, 1897-8; Student at Columbia University, 1897-1900, Fellow in Economics, 1898-1900, Honorary Fellow, 1900-1; Professor of Economics and Finance, New York University, 1900-1; Professor of Economics and Finance, University of Missouri, 1901—.

OSCAR MILTON STEWART, Ph. B., Ph. D.,

Assistant Professor of Physics.

Ph. B., De Pauw University, 1892, Ph. D., Cornell University, 1897; Professor of Physics and Chemistry, Baker University, 1892-4; Fellow, Cornell University, 1895-6, Assistant in Physics, 1896-8, Instructor in Physics, 1898-1901; Assistant Professor of Physics, University of Missouri, 1901—.

FREDERICK HANLEY SEARES, B. S.,

Professor of Astronomy, and Director of the Laws Observatory.

B. S., University of California, 1895; Fellow in Astronomy, University of California, 1895-6, Instructor in Astronomy, 1896-8, Graduate student, 1898-9; Student at the University of Berlin, 1899-1900, at the University of Paris, 1900-1; Professor of Astronomy, University of Missouri, 1901—.

†Absent during session of 1901-2.

CLARENCE HENRY ECKLES, B. Agr., M. Sc.,

Assistant Professor (in charge) of Dairy Husbandry.

B. Agr., Iowa Agricultural College, 1895, M. Sc., 1897; Graduate student, University of Wisconsin, 1896; Instructor in Dairying, Iowa Agricultural College, 1896-1901, and Dairy Bacteriologist to the Iowa Experiment Station; Instructor in Dairy Husbandry, Massachusetts Agricultural College, Short Course of 1898-9; Assistant Professor of Dairy Husbandry, University of Missouri, 1901—.

WALTER ALEXANDER, B. S., M. E.,

Assistant Professor of Mechanical Engineering.

B. S., University of Wisconsin, 1897, M. E., 1898; employed in Mechanical Department of C. M. & W. P. Ry., 1889-93, and during the summer vacations from 1894 to 1898; Instructor in Steam Engineering and Machine Design, University of Wisconsin, 1897-1900; Assistant Professor of Mechanical Engineering, Armour Institute of Technology, 1900-1; Assistant Professor of Mechanical Engineering, University of Missouri, 1901-2.

THOMAS CARSKADON JOHNSON, B. S. Agr., A. M.,

Acting Professor of Horticulture.

B. S. Agr., West Virginia University, 1896, A. M., 1900; Instructor in Science, Lee Military Academy, 1896-9; Fellow, West Virginia University, 1899-1900, Honorary Fellow, 1900-1; Acting Professor of Horticulture, University of Missouri, 1901—.

BENJAMIN BERNARD TURNER, B. Sc., Ph. D.,

Acting Assistant Professor of Chemistry.

Associate of Central Technical College, London, 1891; B. Sc., London University, 1894, Ph. D., University of Gottingen, 1899; Lecturer in charge of Chemistry, Borough Polytechnic, London, 1892-7; Assistant in Chemistry, Cornell University, 1900-1; Acting Assistant Professor of Chemistry, University of Missouri, 1901-2.

*ELMER JAMES McCAUSTLAND, M. C. E.,

Professor of Civil Engineering.

B. C. E., Cornell College, Iowa, 1892, C. E., 1895; M. C. E., Cornell University, 1897; Assistant Engineer, Southern Pacific Railroad, 1886; Resident Engineer, Illinois Central Railway, 1887; City Engineer, Salem, Oregon, 1890-4; Instructor in Civil Engineering, Cornell University, 1897-1900; Principal Assistant Engineer, Chicago Transfer and Cleaning Company, 1900-1; Professor of Civil Engineering, University of Missouri (School of Mines), 1901-2.

*PETER FIREMAN, Ph. D.,

Acting Professor of Chemistry.

Graduated at classical gymnasium, Kharkov, Russia, 1881; Student at the University of Odessa, Russia, 1881; at the University of Koenigsberg, Prussia, 1888-90; at the University and at the Polytechnicum of Zurich, 1890-2; at the University of Berne, 1892-3; Assistant in Chem-

istry, Columbia University, 1893-5; Instructor, 1895-8; Assistant Professor, 1898-1900; Chemical Geologist, U. S. National Museum, Smithsonian Institution, 1901; Acting Professor of Chemistry, University of Missouri (School of Mines), 1901-2.

*PAUL JULIUS WILKINS, B. S.,

Instructor in Modern Languages.

B. S., Michigan A. & M. College, 1869; Instructor in University of Missouri (School of Mines), 1887—.

MARY ESTELLE PORTER, B. L.,

Instructor in Commercial Studies.

B. L., Delaware College, 1876; Student at Bower's School of Shorthand and at Curtiss' Commercial College, Minneapolis; Instructor in Commercial Studies, University of Missouri, 1895—.

*HERMAN OTTO SCHULZE, E. M., C. E.,

Instructor in Metallurgy.

C. E., E. M., 1899, University of Missouri (School of Mines), Instructor in Metallurgy, 1899—.

RICHARD B. MOORE, B. S.,

Instructor in Chemistry.

University College, London, 1886-90; Instructor in Chemistry, Oswestry High School (England), 1890-1; Instructor in Chemistry, Birkbeck Technical College, London, 1891-3; British Museum, 1893-5; B. S., Chicago University, 1896; Laboratory Demonstrator, Chicago University, 1896; Instructor in Chemistry, University of Missouri, 1897—.

*JOHN BENNETT SCOTT.

Instructor in English, and Secretary.

THOMAS JACKSON RODHOUSE, B. S.,

Instructor in Drawing.

B. S. in Civil Engineering, University of Missouri, 1897; Instructor in Drawing, 1897—.

WILLIAM HENRY TURNER, B. S., M. D.,

Instructor in Military Science and Tactics and Acting Commandant of Cadets.

B. S. in Civil Engineering, University of Missouri, 1898, M. D., 1901; Instructor in Military Tactics (in charge), 1898—.

JANE ACKERMAN ZABRISKIE,

Instructor in Household Economics.

Pratt Institute, 1898.

WILLIAM SIDNEY DREWRY, Ph. B., A. M., Ph. D.,

Instructor in History.

A. B., University of Virginia, 1892; Ph. B., 1893; A. M., 1893; Professor of History, Fayetteville (N. C.) Military Academy, 1895-7; Ph. D.,

Johns Hopkins University, 1899 ; Instructor in History, University of Missouri, 1900—.

RICHMOND LAURIN HAWKINS, A. B., A. M.,

Instructor in Romance Languages.

A. B., University of Missouri, 1899 ; A. M., 1900 ; Instructor in Romance Languages, 1900—.

HELEN H. BENDER,

Instructor in Physical Culture.

WINTERTON CONWAY CURTIS, A. B., A. M., Ph. D.,

Instructor in Zoology.

A. B., Williams College, 1897, A. M., 1898, Ph. D., Johns Hopkins University, 1901 ; Assistant in Biology, Williams College, 1897-8 ; Assistant in Biology, Johns Hopkins University, 1899-1900, Fellow, 1900-1 ; Instructor in Marine Biological Laboratory, Woods Hole, Mass., 1898— ; Instructor in Zoology, University of Missouri, 1901—.

ROLLA ROY RAMSEY, A. B., A. M., Ph. D.,

Instructor in Physics.

A. B., Indiana University, 1895, A. M., 1898, Ph. D., Cornell University, 1901 ; Laboratory Assistant in Physics, Indiana University, 1896-7 ; Professor of Physics, Westminster College (Pa.), 1897-8 ; Scholar, Clark University, 1898-9 ; Assistant in Physics, Cornell University, 1899 ; Instructor in Physics, Indiana University, Dec., 1899-1900 ; Scholar, Cornell University, 1900-1 ; Instructor in Physics, University of Missouri, 1901—.

JOHN SITES ANKENNEY, JR.,

Instructor in Freehand Drawing.

Student at Art Students' League, New York, 1889, 1892 ; at Academie Julian (Atelier Lefebvre) and Ecole des Beaux Arts, Paris, 1893, 1894, and at Atelier Aman-Jean, 1895 ; in galleries of Italy and Holland, summer of 1895, and in Landscape Painting in France, summers of 1893 and 1894 ; Supervisor of Drawing in Carthage Schools, 1896-8, and in Kansas City Schools, 1899-1901 ; Student at Harvard, summer session, 1901 ; Instructor in Freehand Drawing, University of Missouri, 1901—.

WALTER SCOTT WILLIAMS, C. E.,

Instructor in Civil Engineering.

C. E., University of Missouri, 1885 ; Subdivision Engineer on construction, Missouri Pacific Ry., 1886 ; Assistant Engineer on location and construction, K. C. F. S. & M. R. R., 1887-90 ; Chief Engineer on location and construction, Hearne & Brazos Valley R. R., 1891-2 ; Assistant Engineer with Mississippi River Commission, 1893-1901 ; Assistant Engineer in charge of precise levels, U. S. Lake Survey, 1901 ; Instructor in Civil Engineering, University of Missouri, 1901—.

EARL BRENTON SMITH,

Instructor in Shopwork.

- *JAMES CLARK DRAPER, B. S.,
Instructor in Shopwork and Drawing.
 B. S., University of Missouri (School of Mines), 1901.
- *ALBERT DYKE WILSON,
Instructor in Chemistry.
- *GEORGE WALTER HARRIS,
- *JOSEPH CLARK,
Assistants in Chemical Laboratory.
- *LEON ELLIS GARRETT,
Assistant in Mathematics.
- *CORNELIUS MARK DAILY,
Assistant in Physical Laboratory.
- *LAWRENCE MAY,
Assistant in Geological and Mineralogical Laboratory.
- *FREDERICK RAGLAND COWLES,
Assistant in Mathematics.
- *HARRY NOEL REX,
 *ROYAL SYLVESTER WEBSTER,
 *CYRUS EDWARD MINOR,
Assistants in Surveying.
- CARL M. SNEED, M. D.,
Assistant in Pathology.
- PETER POTTER, B. S.,
Assistant in Anatomy.
- †ARTHUR ERMON HACKETT,
Lecturer on Climatology.

 FELLOWS.
In Anatomy:

ELEXIOUS THOMPSON BELL, B. S.

In Chemistry:

EDWARD LEWIS SHEPARD, B. S. in C. E.
 SUKE-SHIGE YANAGI-WARA, B. S.
 ROBERT LEE REID, M. D.

†In the service of the U. S. Weather Bureau.

In English:

WILLIAM SHERMAN JOHNSON, A. B.

In Germanic Languages:

WILLIAM FREDERIC HAUHART, A. B.,
ELIDA CAROLINE KIRCHNER, A. B.,
OTTO REINHOLD PATZWALD, Ph. B.

In Greek:

CHARLES OSCAR JENKINS, A. B.

In History:

MINNIE KATHERINE ORGAN, A. M.,
GUY EDWARD SNIDER, B. L.

In Latin:

GRACE EUGENIE MacMILLAN, A. B.

In Mathematics:

AMANDA FREDERICKA BECKER, B. S.,
TRUMAN LEIGH HAMLIN, A. B.,
FANNY BELL HATCHER, A. B.,
LOUIS INGOLD, A. B.

In Pathology:

HENRY CLAY FREUDENBERGER, A. B.

In Physics:

JOSEPH SUMMERS, A. M.

In Physiology:

CHARLES CLAUDE GUTHRIE, M. D.

In Zoology:

LESTER BENNETT GARY, Ph. B.

STUDENT ASSISTANTS.

In Agriculture:

EDWARD DEAN RHODES.
JOB MARCUS DOUGHTY.

In Drawing:

VIRGIL BIRTON STONE.
EDGAR GLEIM MACLAY.

In English:

ALFRED HANNAH SMITH.
THECKLA KAHN.

In Geology:

LEO GALLAHER.

In Physical Training:

FLOYD WILKINS TUTTLE.
 JOHN BUSHONG WOODS.
 MILTON CLARENCE BURK.
 BLANCHE EARLE ENYART.
 GEORGE HERBERT MOORE.

In Physiology:

THORNTON EASLEY MOORE.

In Shopwork:

GEORGE LAWRENCE MOREHEAD.
 BURNS STEWART.

In Surveying:

MILO HAMILTON BRINKLEY.
 JOHN McCLURE SALMON.

 OTHER OFFICERS.

JAMES T. GEROULD, A. B.,
Librarian.

WALTER K. STONE, A. B.,
Assistant Librarian.

DUNCAN BURNET,
Cataloguer.

*MRS. J. D. CARPENTER,
Librarian.

RICHARD FOSTER RAND, A. B., M. D.,
House Surgeon to the Parker Memorial Hospital.

†ADA EMILY PAYNE,
Superintendent of Nurses.

‡JEAN O. KAY,
Superintendent of Nurses.

J. G. BABB, A. M., LL. B.,
Proctor and Secretary to the Board of Curators.

†Resigned April 14, 1902. ‡From April, 1902.

IRVIN SWITZLER,

Registrar, and Secretary to the Various Faculties.

R. B. PRICE,

Treasurer.

*HENRY WOOD,

Treasurer of the School of Mines.

NOAH M. GIVAN,

Attorney for the Collection of the Collateral Inheritance Tax.

CHARLES L. WOODS,

Secretary to the Executive Committee, School of Mines.

WILLIAM MCGUFFEY HOGE, A. B., A. M.,

Examiner of Schools.

MRS. LOUISE NORWOOD FITCH,

Matron.

APPOINTMENTS TO TAKE EFFECT IN SEPTEMBER, 1902.

ARTHUR MAURICE GREENE, Jr., B. S., M. E.,

Professor of Mechanical Engineering.

WALTER McNAB MILLER, M. D.,

Professor of Bacteriology and Pathology.

GUY L. NOYES, M. D.,

Professor of Eye and Ear Diseases.

B. M. DUGGAR, Ph. D.,

Professor of Botany.

GLEN LEVIN SWIGGETT, Ph. D.,

Acting Professor of Germanic Languages.

LOUIS INGOLD, A. B.,

Acting Assistant Professor of Mathematics.

GEORGE MASON TUCKER, B. S., Ph. D.,

Instructor in Agriculture.

WILLIAM L. WESTERMANN, M. A.,

Instructor in Greek.

WILLIAM H. COOK,

Instructor in Manual Training.

A. B. COBLE, Ph. D.,

Instructor in Mathematics.

HERMANN SCHLUNDT, Ph. D.,

Instructor in Chemistry.

CAROLINE T. STEWART, Ph. D.,

Instructor in Germanic Languages.

There will also be appointed before the beginning of the next session an Assistant Professor of History, substitutes for Professor Schweitzer and Assistant Professor Penn (absent on leave), and Instructors in Athletics and Physiology. The office of Dean of the Graduate Department may also be filled before September.

LECTURERS BEFORE THE UNIVERSITY

W. G. Manly, Professor of Greek Language and Literature, University of Missouri. Subject: "Athens—Ancient and Modern;" November 14, 1901.

F. C. Hicks, Ph. D., Professor of Economics and Civics, University of Cincinnati. Subject: "Socialism;" November 15, 1901.

Hon. J. L. Blair, St. Louis. Subject: "Politics in State Institutions;" November 19, 1901.

Hon. Howard J. Rogers, Albany, N. Y., Chief of the Department of Education, Louisiana Purchase Exposition, St. Louis. Subject: "International Expositions;" December 10, 1901.

Francis W. Kelsey, Professor of Latin, University of Michigan. Subject: "Ten Years of Excavations in Pompeii;" December 19, 1901.

J. M. Greenwood, LL. D., Superintendent of Schools, Kansas City, Mo. Subject: "Waste in Reading;" January 9, 1902.

C. F. Marbut, A. M., Professor of Geology and Mineralogy, University of Missouri. Subject: "A Tramp Through Norway;" January 11, 1902.

Miss Harriet Boyd, A. M., Instructor in Greek, Smith College, Mass. Subject: "Excavations in Crete;" January 25, 1902.

W. L. Sheldon, St. Louis. Subject: "What makes Life worth Living;" January 28, 1902.

Rev. Frank K. Sanders, D. D., Dean of Divinity School, Yale University. Subject: "Recent Archaeological Explorations in the East;" February 19, 1902.

Hon. F. W. Taylor, Chief of the Department of Agriculture, Louisiana Purchase Exposition, St. Louis. Subject: "World's Fairs; Their Educational Value;" March 11, 1902.

GENERAL INFORMATION

Departments of the University:

The University comprises the following Departments:

I—Graduate Department.

II—Academic Department.

III—Department of Education.

IV—Department of Law.

V—Department of Medicine.

VI—Department of Military Science and Tactics.

VII—College of Agriculture and Mechanic Arts, embracing

A. *School of Agriculture.*

B. *Experiment Station.*

C. *School of Engineering.*

VIII—The School of Mines and Metallurgy.

Historical Statement:

The legislative act establishing the public school system was approved February 9, 1839, and that establishing the University was approved February 11, 1839.

The University was located at Columbia, Boone county, June 24, 1839. The cornerstone of the main building was laid July 4, 1840, and this is generally accepted as the date of the foundation of the University. Courses of instruction in Academic work were begun on April 14, 1841. A Normal Department was established in 1867, and was opened in September, 1868. In 1869 women were admitted first to the Normal Department, in 1870 to the Academic Department, and soon after to all Departments. The College of Agriculture and Mechanic Arts and the School of Mines and Metallurgy were made Departments of the University in 1870—the School of Mines and Metallurgy being located at Rolla, where it was formally opened November 23, 1871. The Law Department was opened in 1872; the Medical Department in 1873; and the Engineering Department in 1877. The Experiment Station was established, under act of Congress, in 1888. The Missouri State Military School was created a Department of the University in 1890. In June, 1896, the Graduate Department was established by the Board of Curators. In 1868 the State gave aid for the first time to the University—a sum of \$10,000. On January 9, 1892, the Main Building of the University at Columbia was de-

stroyed by fire. In the following March, the Legislature gave for building and equipment \$236,577. In March, 1893, this fund was increased by a second appropriation of \$264,000, and by \$25,000 additional for a new building at Rolla. The Thirty-ninth General Assembly appropriated \$33,000 to build an additional club house at Columbia and the Fortieth erected a hospital. The Forty-first General Assembly has given for buildings and their equipment at Columbia \$195,000 and for the same purposes at Rolla \$87,000.

For a fuller statement about the College of Agriculture and Mechanic Arts, see announcement of this College.

A. THE DEPARTMENTS AT COLUMBIA.

REQUIREMENTS FOR ADMISSION.

The following are the requirements for admission to the various Departments:

To the Graduate Department:

Graduates of either sex of the colleges and universities comprising the Missouri College Union and of other reputable colleges and universities, and (in exceptional cases, by special permission of the Faculty) other persons of liberal education, are admitted to such graduate work as they are prepared for. See announcement of this Department.

To the Academic Department, the Departments of Education, Law, and Medicine, and the Schools of Engineering and Agriculture:

Twelve units are required for admission to each of these Departments. The subjects in which these units may be offered, the minimum and the maximum number of units that may be offered in each subject, and the number of units required in certain subjects for each Department are presented in the table given below.

For the session 1902-3 candidates for admission to the School of Agriculture may be conditioned on two units.

SUBJECTS.	Maximum ..	Minimum...	Required in the Several Departments.				
	For all Departments.....		Academic and Education.....	Law.....	Medicine	Engineering	Agriculture and Mech. Arts
English	4	2	3	3	2	3	2
Algebra.....	2	1	1	1	1	2	1
Plane Geometry.....	1	1	1	1	1	1	1
Solid Geometry.....	$\frac{1}{2}$	$\frac{1}{2}$	1	1	1	1	1
Plane Trigonometry.....	$\frac{1}{2}$	$\frac{1}{2}$	1	1	1	1	1
History	4	1	Two units in foreign language.	1	1	1	1
Latin	4	1		1	1	1	1
Greek.....	3	1		1	1	1	1
German	3	1		1	1	1	1
French.....	3	1		1	1	1	1
Spanish.....	3	1		1	1	1	1
Physics.....	2	1	1	1	1	1	1
Chemistry.....	2	1	1	1	1	1	1
General Biology.....	2	1	1	1	1	1	1
Zoology.....	2	1	1	1	1	1	1
Botany.....	2	1	1	1	1	1	1
Drawing.....	1	1	1	1	1	1	1
*Shopwork	1	1	1	1	1	1	1

*In the Academic Department and Department of Law, Shopwork may not be offered.

DEFINITION OF UNITS IN THE SEVERAL SUBJECTS.

ENGLISH. The four units that may be offered in English are as follows:

1. *Language.* The principles of the language, as given in any good modern high school grammar.

2. *Rhetoric and Composition.* The student will be required to show, by compositions on subjects given in the examination, a practical knowledge of the principles of sentence and paragraph structure and the ability to express himself coherently and idiomatically. The examination will not be one in formal rhetoric, but the study of a good elementary textbook is recommended.

3. *Literature.* The examination will be upon the masterpieces recommended for college entrance in the North Central States, or an equivalent offered by the candidate. The masterpieces recommended are:

For general reading: Shakespeare's *The Merchant of Venice*; Pope's *Iliad* (Books I, VI, XXII and XXIV); *The Sir Roger De Coverley Papers*;

Goldsmith's *The Vicar of Wakefield*; Coleridge's *The Ancient Mariner*; Scott's *Ivanhoe*; Cooper's *The Last of the Mohicans*; Tennyson's *The Princess*; Lowell's *The Vision of Sir Launfal*; George Eliot's *Silas Marner*.

For minute and critical study: Shakespeare's *Macbeth*; Milton's *Lycidas*, *Comus*, *L'Allegro*, and *Il Penseroso*; Burke's *Speech on Conciliation with America*; Macaulay's *Essays on Milton and Addison*.

4. For the fourth unit the candidate may offer either

Literature. A year's work in English or American literature in addition to that described under 3; or

History of the Language. A year's work in the history of the language (Lounsbury's or an equivalent text); or

Literature and History of the Language. Half a year's work in each.

MATHEMATICS. Four units may be offered in Mathematics, as follows:

Algebra. One unit. Algebra to quadratics in a good textbook such as Smith's *Elementary Algebra*. *Two units:* The completion of the work in a good textbook such as that just named. It is recommended that the teacher supplement the work in ordinary texts for the second unit in Algebra.

Plane Geometry. One unit: The completion of Plane Geometry.

Solid Geometry. One-half unit: The completion of Solid Geometry.

Trigonometry. One-half unit: The completion of the work on Plane Trigonometry in a good text.

HISTORY. The four units that may be offered in History are as follows:

General History. One unit: The equivalent of the work given in Myers' *General History*. *Two units:* The equivalent of the work given in Myers' *Ancient History* and Myers' *Mediaeval and Modern History*.

English History. One-half unit (see note below): The equivalent of the work given in Ransome's *Short History of England*. *One unit:* The equivalent of the work given in Green's *Short History of the English People*.

American History. One-half unit (see note below): The equivalent of the work given in Johnston's *The United States—Its History and Constitution*. *One unit:* The equivalent of the work given in Channing's *A Student's History of the United States*. The examination in this subject will include questions on Civil Government.

Note. A half-unit in English or American History will be accepted only when accompanied by at least one unit in General History.

LATIN. The four units that may be offered in Latin are as follows:

1. Collar and Daniell's *First Latin Book* or the equivalent.

2. Three books of Caesar's Gallic War with composition based thereon in Moulton and Collar's Preparatory Latin Composition or in Daniell's New Latin Composition. For one book of the Gallic War the equivalent in time of Viri Romae, Nepos, or Eutropius may be offered.

3. Two additional books of the Gallic War and four Orations of Cicero with the composition based thereon in the books mentioned above.

4. Ovid's *Metamorphoses* (2,000 lines) and four books of Vergil's *Aeneid*, with prosody.

GREEK. The three units that may be offered in Greek are as follows :

1. White's First Greek Book, or Gleason and Atherton's First Greek Book.

2. Three books of Xenophon's *Anabasis*, Pearson's Greek Prose Composition, or its equivalent, Goodwin's Greek Grammar.

3. Ten orations of Lysias and the first four books of Homer's *Odyssey*, or an equivalent amount of other Greek authors. Bridgman's *Parallel Exercises* based on Lysias.

GERMAN. The three units that may be offered in German are as follows :

1. The parts of speech as presented in some good, complete German grammar: reading of Storm's *Immensee*, Volkmann's *Kleine Geschichten*, or the equivalent of such reading.

2. (In addition to 1.) Syntax, composition (such as given in the first half of Harris's *Prose Composition*), reading of Benedix's *Doktor Wespe*, Freytag's *Die Journalisten*, Schiller's *Wilhelm Tell*, or the equivalent of such reading: also ability to pronounce German correctly.

3. (In addition to 1 and 2.) Composition (such as is given in the last half of Harris's *Prose Composition*), letter-writing; reading of Schiller's *Maria Stuart*, *Das Lied von der Glocke*, Goethe's *Goetz von Berlichingen*, *Hermann und Dorothea*, Lessing's *Minna von Barnhelm*, Emilia Galotti, or the equivalent of such reading; sight-translation.

FRENCH. The three units that may be offered in French are as follows :

1. A year's work, five forty-minute periods or three sixty-minute periods a week. The candidate will be required to show a knowledge of the main principles of grammar, a good pronunciation, and the ability to translate at sight ordinary nineteenth century prose. He should have read not less than four hundred pages selected from at least three authors.

2. A year's work in addition to that outlined under 1. The candidate will be required to show proficiency in syntax, the ability to translate at sight standard prose into simple and idiomatic English, and some facility in writing in French short accounts connected with the works

read, or in translating from English a passage of connected prose. Special attention should be paid throughout to pronunciation with the object of securing readiness of utterance in addition to correctness, in order that the candidate may easily understand the spoken language, and if possible, carry on a simple conversation or answer simple questions in the foreign idiom. It is recommended that the choice of texts for second year work be confined chiefly to standard works of the eighteenth and nineteenth centuries, with some attention to the classic drama (a play of Corneille, Racine, and Moliere).

3. By a third unit in French is meant the results of a progressive study of the language during a third year under the same general conditions as for a second unit. These should comprise the reading of about a thousand pages of standard French, classical and modern; and the writing of numerous short themes in French, in which the rules of syntax may be correctly observed. The works should be read, not translated, with the exception of the more difficult passages, the spoken language should be readily understood, and, as far as possible should be the only medium of communication in the class. The reading matter should include manuals setting forth the leading facts of political and literary history in France—as Rombaud, *Petite Histoire de la Civilisation Française*; Petit de Julleville, *Leçons de la Littérature Française*, or Gazier, *Petite Histoire de la Littérature Française*.

SPANISH. The three units that may be offered in Spanish are as follows:

1. A year's work, with the same requirements in grammar, pronunciation, and reading as for the first unit in French, described above.

2. A second year's work in Spanish, parallel to the second year in French described above. It is recommended that the choice of texts for the second year be confined chiefly to standard works of fiction from the nineteenth century (Caballero, Alarcon, Valera, Galdos, Valdes).

3. A third unit in Spanish comprises the study of Cervantes, *Don Quijote* and *Novelas Ejemplares*; Quevedo, *Suenos*; Guzman de Alfarache (Part 1); *Lazarillo de Tormes*. The last two if difficult to be found may be replaced by three plays of Lope de Vega and two of Calderon. This unit expects some linguistic fluency, as it is intended to apply chiefly to Spanish-Americans who have had good facilities for pursuing literary studies in their mother tongue, and who may wish to make the most of their opportunities, on an equal footing with French, in using suitable entrance material.

CHEMISTRY. The two units that may be offered in Chemistry are as follows :

1. A year's work in Chemistry, five periods a week, of which at least three must be devoted to laboratory work.

2. A second year's work in the subject, with periods as above.

PHYSICS. The examination in Physics will be on both the text and the laboratory work. The candidate must present material evidence of having done the amount and kind of laboratory work required, such as his note-book containing a record of the experiments performed by himself. The two units that may be offered are as follows :

1. A year's work of the grade done in an approved high school. At least one-half must be laboratory work.

2. A continuation of the laboratory for another year, or a year's work in a more advanced text together with laboratory work.

GENERAL BIOLOGY. *Note.* In General Biology and Zoology the study of each form must include a consideration of (1) habitat, (2) geographical distribution, (3) food, (4) adaptation to environment, including relation to other forms of animal and plant life, (5) habits and functions, (6) life-history, and (7) structure. *Note-books and drawings showing work done must be presented.*

The two units that may be offered in General Biology are as follows :

1. One year's work, including not less than five periods a week, three of which at least have been devoted to laboratory work. The following series of animal and plant forms is recommended: (1) *Amœba*, (2) *Paramœcium* or *Vorticella*, (3) *Hamatococcus*, (4) *Yeast Plant*, (5) *Spirogyra*, (6) *Hydra*, (7) *Mucor* or *Penicillium*, (8) *Earthworm*, (9) *Crayfish*, (10) *Grasshopper*, (11) *Fern*, (12) *Fresh-water Mussel*, (13) *Seeds and Seedlings*, (14) *Flowering Plant*, (15) *Frog, with metamorphosis*.

2. More advanced work in the subject, with a study of additional forms, during the same length of time as required for 1.

ZOOLOGY (See note under General Biology, above). The two units that may be offered in Zoology are as follows :

1. A year's work with periods as described above for General Biology. The following series of animals is recommended: (1) Protozoa (*Amœba*, and *Paramœcium* or *Vorticella*), (2) A Cœlenterate (*Hydra*), (3) An Echinoderm (*Sea-urchin* or *Starfish*), (4) An Annelid (*Earthworm*), (5) a Parasite Worm (*Cestode*), (6) A Decapod Crustacean (*Crayfish*), (7) An Orthopterous Insect (*Grasshopper*, and comparison with other Orthoptera), (8) A Coleopterous Insect, (9) A Lepidopterous Insect, with *larva* and *pupa*, (10) A Hymenopterous Insect, (11) A

Pelecypod Mollusc (*Fresh-water Mussel*), (12) An Amphibian (*Frog, with metamorphosis*).

2. More advanced work in the subject, with study of additional forms, during same length of time as required for 1.

BOTANY. The two units that may be offered in Botany are as follows:

1. Bergen's Foundations of Botany and Coulter's Plant Relations, or an equivalent. Note-books showing actual work done by the student must be presented.

2. For a second unit either Structural Botany of Phanerogams or Cryptogamic Botany may be offered.

SHOP WORK. One unit in Shop Work may be offered for admission to any Department except the Academic and Law Departments. The candidate must give satisfactory evidence of having completed a year's work (five periods a week of at least an hour and a half each) in Shop-work.

Time of Examinations:

Examinations for admission will be held at the University September 4 to 8, 1902. All persons desiring to enter the University at the opening of the session in the fall of 1902, except those holding certificates of graduation from Approved Schools and those who have already otherwise fulfilled the entrance requirements must present themselves at the Registrar's office, room 4, Academic Hall, at 8:30 a. m., Thursday, September 4. They will then receive complete directions as to examinations.

The programme of examinations is as follows:

Thursday, September 4.—9 a. m., English; 2 p. m., Mathematics.

Friday, September 5.—9 a. m., Latin, German, Spanish; 2 p. m., Physics.

Saturday, September 6.—9 a. m., Biology, Zoology, Botany, French, Greek; 2 p. m., General History, Drawing.

Monday, September 8.—9 a. m., English History, American History; 2 p. m., Chemistry, Shopwork.

Acceptance of Grades:

Students who do not hold diplomas from Approved Schools (pages 37-9) may present their grades in any subject, but the acceptance of these grades in place of an examination in that subject rests wholly in the judgment of the Professor of the subject, except in the case of applicants from other States than Missouri, whose grades may be accepted by the President of the University.

Students who wish to present grades in lieu of examination in any subject should have them certified to by the proper official of the school in which the grades were made.

Advanced Standing:

Claims for advanced standing, in order to receive recognition, must be made by the student within one semester after entrance. Of his fitness for advanced work he must satisfy, by examination or otherwise, the Professor of the subject which he elects.

Academic students who wish to have their claims for advanced standing passed on before matriculation may present them to Professor J. C. Jones, Dean of the Department, at any time. Students in Engineering should present them to professor H. B. Shaw, Chairman of Committee on Advanced Standing for the School of Engineering.

Special Students:

Special students will be admitted to the University without passing the regular examination required for entrance, under the following conditions: (1) They must be at least 21 years of age: (2) they must show good reason for not taking a regular course: (3) they must pass such examination or other tests as shall demonstrate fitness to pursue profitably all the subjects selected by them: (4) they will not be allowed to take work in more than two subjects with such kindred work as the Head Professor may suggest. Special students are required to take all regular examinations, and are expected to do specially good work in the subjects which they choose. If at any period of the session their work becomes unsatisfactory in one or both of the two major subjects, their connection with the University shall be severed by the Dean of the Department.

Hearers:

Under exceptional circumstances persons over 21 years of age may, with the consent of the President, the Dean, and the instructors concerned, be admitted to courses as Hearers. Hearers must be enrolled and pay fees, but are not required to take examinations, and receive no credit toward a degree.

ADMISSION FROM APPROVED SCHOOLS.

The University will admit without examination such graduates of an Approved School as bring proper credentials of the fact that they have completed the subjects required for entrance to the Department which they desire to enter. For these requirements see table on page 31. It will admit free of entrance, library and incidental fees for the first year the student graduating from the school with the highest honors.

The diploma will not be accepted as a credential. The student must present the proper form of certificate signed by the Principal or Superintendent of the Approved School. Blank certificates will be furnished by

the Registrar upon application. The University recommends that Approved Schools do not issue such certificates to any students except to those that have graduated. These Certificates should be filled out and sent to the Committee on Entrance by Certificate, at any time *not later* than the first day of entrance examinations in September. It is desirable that the Certificates be sent in advance in order that possible errors may be detected and the student notified accordingly.

For the requirements for the Approval of Schools see the "Circular of Information" issued by the University.

APPROVED SCHOOLS.

Albany High School.	Independence High School.
Alton (Ill.) High School.	Jefferson City High School.
Bethany High School.	Joplin High School.
Blees Military Academy, Macon.	Kansas City High School.
Bloomfield High School.	Kansas City Manual Training School.
Bonne Terre High School.	Kansas City (Kan.) High School.
Boonville High School.	Kemper Military School, Boonville.
Brookfield High School.	Keokuk (Iowa) High School.
Buchanan College, Troy.	Kewanee (Ill.) High School.
Butler High School.	Kidder Institute, Kidder.
Cairo (Ill.) High School.	King City High School.
California High School.	Kirksville High School.
Cameron High School.	Kirkwood High School.
Carrollton High School.	Lamar High School.
Carthage High School.	Lancaster High School.
Carthage Fitting School, Carthage.	Leavenworth (Kan.) High School.
Chillicothe High School.	Lexington High School.
Christian College, Columbia.	Louisiana High School.
Clinton High School.	Marionville Collegiate Institute.
Columbia High School.	Marshall High School.
Columbia Normal Academy.	Mary Institute, St. Louis.
Covington (Ind.) High School.	Maryville High School.
Culver (Ind.) Military Academy.	Memphis High School.
Davenport (Iowa) High School.	Mexico High School.
East St. Louis (Ill.) High School.	Miami High School.
Everton High School.	Michigan Military Academy,
Fort Scott (Kan.) High School.	Orchard Lake, Mich.
Fort Smith (Ark.) High School.	Milan High School.
Gallatin High School.	Moberly High School.
Greenfield High School.	Monroe City High School.
Greenville (Miss.) High School.	Montgomery City High School.
Hamilton High School.	Mound City High School.
Hannibal High School.	Nevada High School.
Hardin College, Mexico.	Norborne High School.
Harrisonville High School.	Odessa High School.
Hosmer Hall, St. Louis.	Oregon High School.
Hot Springs (Ark.) High School.	Paola (Kan.) High School.
Iberia Academy.	

Paris High School.
 Pierce City High School.
 Pine Bluff (Ark.) High School.
 Poplar Bluff High School.
 Princeton High School.
 Quincy (Ill.) High School.
 Rich Hill High School.
 Richmond High School.
 Rogers Academy, Rogers, Ark.
 St. Joseph High School.
 St. Louis High School.
 St. Louis Manual Training School.
 Sedalia High School.
 Shelbyna High School.
 Shelbyville High School.
 Slater High School.
 Smith Academy, St. Louis.
 Springfield High School.

Sweet Springs High School.
 Tipton High School.
 Trenton High School.
 University Academy, Columbia.
 University Military School.
 Mobile, Ala.
 Vandalia High School.
 Walther College, St. Louis.
 Warrensburg High School.
 Washington High School.
 Webb City High School.
 Webster Groves High School.
 Wentworth Military Academy,
 Lexington.
 West Plains College, West Plains.
 Westport High School.
 Windsor High School.

Normal Schools:

Graduates of the three State Normal Schools in the advanced Latin course will be admitted to any Department of the University, without examination and without condition. They will receive, moreover, thirty-two (32) hours' credit for advanced standing in the Academic Department. Those who have graduated in the combined Latin and English course will receive thirty-six (36) hours' credit for advanced standing.

Examiner of Schools:

The position of Examiner of Schools has been established by the Board of Curators to facilitate the work of bringing the secondary schools into close connection with the University.

BUILDINGS AND EQUIPMENT.

Location:

The University of Missouri is located near the center of the State, in Columbia, a town of about 6,000 inhabitants, situated half way between St. Louis and Kansas City.

It is conveniently reached from the east, north and west by the Wabash Railroad and connecting lines. The Missouri, Kansas and Texas Railroad affords a direct route to Columbia to persons living on that line, and to those living on the Missouri Pacific, Frisco, and Kansas City, Fort Scott and Memphis Railroads.

The surrounding country is elevated, well drained and diversified. It is a limestone region, remarkable for its healthfulness. The University Campus includes 32 acres of undulating ground in the southern part of the town. The Experiment Farm lies one square south of the Campus,

and comprises 648 acres. The Horticultural Grounds (a part of the Farm) are one square east of the Campus and include about 30 acres.

Buildings:

The University has the following buildings:

On the Campus—Academic Hall, separate buildings for Agriculture, Chemistry, Engineering, Geology and Zoology, Law, Mechanic Arts, and Medicine, two dormitories, the Parker Memorial Hospital, the Laws Observatory, the power house, and the President's house; on the Farm—the Agricultural Farm buildings, including the new buildings for Live Stock Judging and for Dairying; on the Horticultural Grounds—the green-house and the Horticultural building.

New Buildings:

The Forty-first General Assembly gave \$40,000 for the construction and equipment of a Dairy building; the same amount for a Medical building; \$35,000 for a dormitory for young women; \$40,000 for a Horticultural building, and the same amount for an Engineering laboratory. The contracts have been awarded for all of these buildings, and the work of construction is in progress.

Laboratories and Museums:

Laboratories. Facilities for practical instruction in the sciences are provided in the following laboratories: Anatomy, Astronomy, Bacteriology, Botany, Chemistry (including Agricultural Chemistry and Experiment Station work), Engineering (Civil, Electrical, and Mechanical), Entomology, Experimental Psychology, Geology and Mineralogy, Horticulture, Pathology, Phonetics, Physics, Physiology, Zoology.

For the further equipment of laboratories the Forty-first General Assembly appropriated \$25,000.

Museums. There are also museums of Agriculture, Classical Archaeology, Geology, and Zoology.

Shops. There are shops for bench work in wood and for sloyd, a wood-lathe room, a forge room, and a machine shop.

Drawing Rooms. Rooms are provided for free-hand drawing, mechanical drawing, and for special drawing in Civil, Electrical and Mechanical Engineering.

Experiment Station:

The Agricultural Experiment Station is on the Horticultural Grounds. Bulletins giving the results of experiments are issued at intervals. The Station is provided with an outfit of meteorological instruments, and daily observations are made by an officer of the U. S. Weather Bureau. See announcement under College of Agriculture and Mechanic Arts.

Dormitories:

The University has two Dormitories which can lodge 140 young men and can furnish meals at small cost to about 400. These are substantial brick buildings on the Campus. Read Hall, the new Dormitory for women, is in course of construction on the Horticultural Grounds.

ORGANIZATION AND GOVERNMENT.

Organization:

The University Council consists of the President, Deans, Professors and Assistant Professors, in all the Departments of the University. It is the highest organized body of the Faculty. Each Department of the University has its special Faculty, consisting of the Professors and some other teachers who give instruction in it.

The President is the executive head of the University, and is a member of all the Faculties.

Lectures and Recitations:

Lectures and recitations in all Departments, except that of Law, are held on six days in the week.

Religious Exercises:

Religious exercises are held every morning. They consist of a hymn by the choir, readings from the Old and New Testaments, a brief prayer, and a closing hymn by the congregation. These exercises are made as attractive and beneficial as possible. During every session distinguished members of various churches have been invited to preach to the students and Faculty.

In Columbia there are churches of nearly all the prominent denominations. The University advises its students to attend regularly the services at the churches of their parents. The students maintain an efficient chapter of the Young Men's Christian Association, and one also of the Young Women's Christian Association. (See p. 54.) The University has much of moral and religious influence, but is non-sectarian.

Provisions for Young Women:

All Departments of the University are open to women. In the lecture-rooms they receive the same instruction and meet the same intellectual requirements as the men. There are special rooms—six in number—furnished with admirable equipment for health and comfort, and presided over by a matron, who has charge of all the young women in attendance. One of these rooms is fitted up as a gymnasium, containing all the appliances necessary for physical culture. During lecture hours the young women, when not attending lectures, are expected to be in their

waiting-rooms, or in the University library, or at their respective homes. The new dormitory will furnish accommodations for a limited number of young women. Board may also be secured at reasonable rates in private families.

Discipline:

In the government of the University, the President and the Faculty rely chiefly upon the sense of duty of the students. The student is expected to pursue his studies with diligence, to attend classes regularly, and to live in the exercise of morality and good behavior. The removal of those who fail to meet these requirements is demanded in the interest of the University and the better class of students. Students are under the direct supervision of the University only when on the Campus, but they are responsible for their conduct wherever they may be.

Directions for New Students:

1. New students should first present themselves for examination. This should be done *before paying entrance fees*. For dates of examinations, see the Calendar, page iii.

2. After passing the entrance examinations, the student must pay to the Treasurer the amount required. See "Expenses," pages 44ff.

3. The Treasurer's receipt should be at once presented to the Proctor, who will enroll the student's name and give him his class-card, with instructions how to have it filled.

4. If assistance is needed in obtaining board, application should be made to the Proctor.

5. For special directions to Academic students, see page 65.

STUDIES.**Regulations in Regard to Studies:**

No student in any Department of the University may have more than 18 hours a week in the lecture room.

Academic students are expected to spend not less than 12 nor more than 16 hours a week at lectures or recitations. But students who are candidates for the Life Certificate may take 3 hours of Industrial work in addition to 15 hours of Academic work for each year.

One hour in the lecture-room is considered equal to two and one-half in the laboratory, the drawing-room, the shop, and the commercial-room.

Class-cards taken out at entrance must be properly filled and deposited with the Registrar, within three days after they have been issued.

Students that enter the University in the first semester and wish to make any change in their class-cards for the second semester, are re-

quired to make such changes on or before the first day of the second semester. Students that fail to comply with this requirement must pay a fee equal to one-half of the regular fees for the session, unless the delay has been clearly unavoidable.

Studies in other Departments:

Students registered in one Department may take work in other Departments for which, in the judgment of the Professors concerned, they are prepared; but only with the consent of the Dean of the Department in which the student is registered. Students taking work in another Department than that in which they are registered are subject as respects this work to the rules of the Department in which the work belongs.

1. Academic students may take Hygiene in the Medical Department, Drawing, Book-keeping, Shop-work, and any other work not below the Freshman grade, in the College of Agriculture and Mechanic Arts, and any instruction offered in the Department of Education. None of this instruction, however, shall count toward any Academic degree unless it is allowed in the regulations respecting studies for such degree. See page 65.

2. Law students may take any instruction offered in other Departments of the University, but it shall not count toward any degree in Law.

3. Medical students in the first year may take any work offered in the Academic Department, and the College of Agriculture and Mechanic Arts; and in their second and third years, any work offered in the University; but such work shall not count toward the degree of M. D. unless it is included in the regular Medical course.

4. Students in the School of Agriculture may take as electives any studies approved by the Dean.

5. Engineering students may take in their Freshman and Sophomore years any instruction offered in the Academic Department, the Department of Education, or the School of Agriculture, and in their Junior and Senior years they may take anything offered in the University; but such instruction shall not count toward a degree in Engineering.

6. No work shall count toward the Life Certificate to teach, except so far as it may conform to the requirements specified in the announcement of the Department of Education.

7. Instruction in Military Science and Tactics is open to men in all Departments.

8. Students may take work in the Summer School (see Appendix) and receive a maximum credit therefor of six hours for a term of six weeks or twelve hours for the session of twelve weeks. No more credit for summer work is allowed.

Graduate Studies:

See announcement of Graduate Department.

Examinations:

1. Examinations at the end of each semester close the studies pursued to that point. Re-examination for change of grade when the grade is 70 or more shall not be allowed in any case. For all successful examinations for the removal of conditions, i. e., where the first grade received is above 50 and below 70, the grade of 70 shall be given unless the student takes the subject again in the class.

2. All special examinations, except for change of grades, and the acceptance of grades from other institutions, are in the discretion of the Professors.

Class Honors:

The honor of valedictorian is awarded in the various Departments to the student who has the highest grade.

In granting degrees, the following distinctions are made: Students graduating with a final average grade of 70 and below 95 receive the diploma; those graduating with a final average grade of 95 or more may have inserted in their diplomas *cum laude*, *magna cum laude* or *summa cum laude*, in accordance with the quality of their work. But misconduct or unexcused absences may forfeit the right of any student to such distinction.

Reports:

From all Departments, except those of Law and Medicine, reports of students are sent, at the close of each semester, to the parents or guardians, showing their standing in the subjects that they are pursuing. The reports of students in Law and Medicine are sent out at the close of the session.

EXPENSES.**Fees and Deposits:**

Students in the Academic Department, in the Departments of Education and Medicine, and in the Schools of Agriculture and Engineering pay an entrance, library, and incidental fee of \$5.

Law students (regular or special) pay \$10 a year. Students entering late or leaving early will not be entitled to any reduction in the amount of the fee. Books cost about \$35 a year.

State Cadets in the Academic Department or in the College of Agriculture and Mechanic Arts, including the School of Engineering, pay no entrance, library and incidental fee, but make all the laboratory and

other deposits required of other students. If they take any study whatsoever in Law or in Medicine, they must pay the full fee of the Department.

Graduate students in any Department of the University pay an entrance, library, and incidental fee of \$5 a year, and make all the usual deposits, including laboratory deposits if they take laboratory work. If they take undergraduate work in any of the classes in Law, they must pay the full fee in that Department. Graduates of colleges and other universities will not be classed as graduate students if they take undergraduate work only.

No part of the entrance, library and incidental fee (\$5) is remitted for late entrance or refunded for withdrawal.

In the laboratories of Chemistry and Physiology, a deposit of \$5 is required for each semester; in all other laboratories, and in the Shop, the deposit is \$5 for the session or any part thereof. Of this deposit, \$2.50 is retained as a laboratory fee for the session; the remainder, less deduction for cost of material used or for injury to apparatus, is returned at the end of the laboratory course in any session. Only Fellows are exempt from making these deposits—this exemption applying only to those laboratories in which they give instruction.

In all cases where the original deposit does not cover the cost of material used and the damage to property, an additional charge will be made which shall be sufficient to cover the excess of material and damage over the original deposit. Where damage or loss is suffered by a laboratory it will be assessed against the deposits of the students using the Laboratory at the time of the damage or loss, unless such damage or loss can be traced to some individual student or students.

Laboratory deposits and rent of rooms in the Dormitories must be paid to the Proctor; all other fees must be paid at the Boone County National Bank, to the Treasurer of the University. *All fees and deposits must be paid in advance.*

Students who by reason of sickness enjoy the privileges of the Hospital will be charged a reasonable amount therefor.

Any student who does not pay promptly his dues of any sort to the University shall be liable to suspension or expulsion.

The student who has attained the highest rank in the graduating class of any Approved School will be permitted to enter the Academic Department of the University, or the College of Agriculture and Mechanic Arts (including Engineering) without the payment of the entrance, library and incidental fee for the first year.

Students who fail to comply with the regulation requiring changes in class-cards in the second semester to be made on or before the first day

of the semester, must pay a fee equal to one-half the fees for the session, unless specially excused. Excuses will not be granted except for grave reasons.

Dormitories and University Boarding Club:

The two Dormitories lodge 140 students, and can furnish meals at small cost to about 400. Room rent for each student is from \$13 to \$31 a year, according to the location of the room, and permits to dining room privileges are \$14 a year. These charges are payable on or before the first of September and include room rent, the attention of servants, heat, water, and the aid of a Steward who supervises the housekeeping, the kitchen and the dining room. In order to secure a room in any Dormitory, it is necessary to make a deposit of \$5, which will be credited on the room rent when paid. Any student who does not room in a Dormitory may secure from the University Proctor a permit to take meals in the dining room upon payment of \$14 a year. Students who rent rooms or who take out meal permits for the regular session are required to make a deposit of \$5 each as security against damage to, or loss of, University property. Students in the Summer Session who rent rooms in the Dormitories are required to pay \$3 a term (six weeks). All such students must make a property deposit of \$3, returnable at the end of the term if no damage to property has been done by the student. The cost of room rent, board, lights and washing to those who enter a Dormitory is about \$2.25 a week. Each room in Dormitory No. I is furnished with a double bedstead, a table and two chairs. Each room in Dormitory No. II is furnished with two single bedsteads, a table and two chairs. The occupants are expected to furnish whatever else they deem necessary. The buildings are furnished with a good system of steam and hot air heating and ventilation and with closets and bath rooms of the best quality. The rooms are lighted with electric lights.

Board in the Dormitories is managed by a Club of students. They have their own officers—president, commissary, secretary, censors, etc. They levy and collect assessments, buy their own provisions, and thus regulate their own expenses. A Steward is employed to supervise the preparation and serving of the food and the cleaning of the buildings.

Only two students will be allowed in one room, except by consent specially given by the Executive Board; and when three thus occupy one room, each of the three must pay full room rent.

Students in the Short Course in Agriculture who may rent such rooms in either of the Dormitories as are vacant at the time of their entrance shall pay therefor in the proportion which the length of their course of instruction bears to the entire session.

Except by consent of the Proctor, specially given, students that do not rent rooms in a Dormitory will not be permitted to take their meals at the Club table. When consent is given the student pays the Proctor of the University \$14 a year. The charges made by the University do not include an initiation fee of \$1 charged by the Club. Students in the Short Courses in Agriculture and Horticulture pay for table board a permit of \$4 and an initiation fee of \$1.

On no account will table board in the Club be given to any persons not duly matriculated in the University, or to any person without a permit from the Proctor.

Each student renting a room in one of the Dormitories, or taking out a permit to take meals, shall be required to make a deposit of \$5. This deposit will be refunded at the close of his connection with the Club, provided he has paid all charges against him personally for damages to, or loss of, University property, and his proportionate part of the charges against the Club for such damage or loss.

Students who rent rooms in a Dormitory or take out permits for meals, shall not have any part of the amount paid by them refunded, but such students may, with the consent of the Proctor, re-rent their rooms or assign their permits.

Order in the Dormitories is maintained by monitors appointed by the Curators, who report any disorder to the Dormitory Board, consisting of the Dean of the Academic Department, the Proctor, and the Chairman of the Discipline Committee.

As the accommodations of the Dormitories are limited, it is necessary for students who wish to engage rooms to make early application for them; they are frequently all engaged before the opening of the college year. The rooms are assigned in the order of application, and requests for them must be made to the Proctor of the University, J. G. Babb.

DEGREES AND CERTIFICATES.

Degrees:

The following degrees are now conferred by the University:

In the Academic Department, Bachelor of Arts (A. B.), Master of Arts (A. M.), and Doctor of Philosophy (Ph. D.).

In the School of Agriculture, Bachelor of Science in Agriculture (B. S.), and Master of Science in Agriculture (M. S.).

In the Law Department, Bachelor of Laws (LL. B.), and Master of Laws (LL. M.).

In the Medical Department, Doctor of Medicine (M. D.).

In the School of Engineering, Bachelor of Science (B. S.) in Civil Engineering, in Electrical Engineering, in Mechanical Engineering, and in Sanitary Engineering, respectively. The degrees of Civil Engineer (C. E.), Electrical Engineer (E. E.), Mechanical Engineer (M. E.), and Sanitary Engineer, are also given for graduate work.

The degrees of B. S. in Mining Engineering, in Civil Engineering, and in Chemistry and Metallurgy, and the graduate degrees of Civil Engineer (C. E.), and Engineer of Mines (E. M.), are given in the School of Mines and Metallurgy, at Rolla. It gives also the degree of B. S. in an Academic Course in Science.

The Master's degree and the degree of Doctor of Philosophy (Ph. D.), are conferred upon the completion of sufficient graduate work. For particulars, see page 59.

Except that of Doctor of Laws (LL. D.), no degrees are conferred *honoris causa*.

For further information, see announcements of the respective Departments.

Certificates:

A certificate is given in Military Science and Tactics, and one in Household Economics. No one can enter any course for which a certificate is granted who has not met the entrance requirements of some Department of the University.

For further information see announcements of the various Departments.

COMMENCEMENT EXERCISES.

The Commencement Exercises occupy the four days ending with the first Wednesday in June of each year. For specific days, see Calendar, page iii.

SCHOLARSHIPS AND PRIZES.

Curators' Scholarships:

By order of the Board of Curators, the student who attains the highest rank in the graduating class of any Approved School will be permitted to enter the Academic Department or the College of Agriculture and Mechanic Arts (including Engineering) without the payment of the first year's entrance, library, and incidental fee.

The following students were admitted during the session of 1901-2 under this provision:

Jennie A. Duvall.....	Harrisonville High School
Roy H. Dyer	Marshall High School
Dora M. Hennicke.....	Boonville High School
Uriel W. Hughes	Miami High School
Charles F. Lack.....	Univ. Mil. Acad., Mobile, Ala.
Charles W. Leaphart	Brookfield High School
Lura M. Moling	Cameron High School
Katherine Moss	Paris High School
Charles G. Ross	Independence High School
Lulu M. See.....	Jefferson City High School
Gussie M. Terrell	Macon High School
Courtney R. Vaughan	Butler High School
Lois Welty	Oregon High School

The student attaining the highest grade, or who shall be first in merit, in taking the degree of A. B., B. S., or B. L., in the graduating class of any of the universities or colleges composing the Missouri College Union, will be admitted to the University for the first year without payment of any tuition, library or incidental fee. The Missouri College Union is now composed of Washington University, Westminster College, William Jewell College, Drury College, Central College, Missouri Valley College, St. Louis University, Park College, and the University of Missouri.

Free Scholarships in the Academic Department are offered to such students from the "Masonic Home of Missouri," St. Louis, and the "Odd Fellows' Home," Liberty, as may be prepared to enter the University.

Students who hold Fellowships (see page 52) are admitted to the University without the payment of entrance, library and incidental fees, or deposits in the laboratories in which they give instruction.

The James S. Rollins University Scholarships:

In 1889 the Hon. James S. Rollins left six thousand dollars (\$6,000) to endow six Scholarships in the University—"the interest" on this \$6,000 "to be forever used and appropriated under the authority and by the direction of the Board of Curators of the University of the State of Missouri, for the following purposes, that is:

"To found Scholarships to be awarded by the President and Faculty of the University—the vote in each case to be by ballot—as a reward for excellence and promise in—

"*First.* The College of Arts, for the degree of A. B., fifty dollars.

†"*Second.* The College of Arts, for the degree of B. S., fifty dollars.

†The B. S. degree is no longer conferred in the Academic Department. This Scholarship is now awarded to a candidate for the A. B. degree.

"*Third.* The College of Agriculture and Mechanic Arts, for the degree of B. Agr., fifty dollars.

"*Fourth.* The College of Law, for the degree of LL. B., fifty dollars.

"*Fifth.* The College of Medicine, for the degree of M. D., fifty dollars.

"*Sixth.* The College of Engineering, for the degree of C. E., fifty dollars.

"These Scholarships are intended as a recognition of merit and character in the beneficiaries, and shall be payable on the first day of June of each year to that member of the *Junior class*, in each of the Colleges designated, who shall be adjudged entitled to it by the President and Faculty; and the names of the persons receiving said Scholarships shall be publicly announced on Commencement Day by the President of the University.

"In according these Scholarships, it is earnestly impressed upon the President and Faculty of the University, that in the mind of the donor, purely intellectual and literary ability are not alone to be considered, but that the moral character of the contestants should be regarded as a factor of no small weight in coming to a decision.

"With the earnest hope that by the means here provided, worthy young men and women may in all coming time be helped and encouraged in their struggle toward a higher life and a greater usefulness, this fund is committed to the honor and good faith of the State, whom the Board represents, and by whose authority the donation is made and accepted."

The Laws Astronomical Medal:

A medal, called the "S. S. Laws Astronomical Medal," is offered annually at Commencement to the student who stands highest in Astronomy, and has at the same time attained a high average of general scholarship. An original thesis written on some astronomical subject, and showing capacity for scientific investigation, is required.

Dachsel Prize:

Ten dollars in money, by the late Charles Dachsel, engineer, of Jefferson City, Mo., is awarded for the best thesis on the Steam Engine.

McAnally Medal:

The McAnally Medal is offered for the best essay, thesis, or poem by a member of the Senior class, competing under certain rules laid down by the founder of the prize. Subject for 1903, "The Literature of Missouri."

Law Prize:

The Edward Thompson Company, Law Publishers, of Northport, New York, give annually to the author of the best thesis submitted by a member of the graduating class a prize consisting of a complete set of their famous American and English Encyclopedia of Law. This set consists of thirty-one volumes, and valued at \$300.

Declamation Prizes:

For 1903 three prizes in cash—one of \$25, one of \$15, and one of \$10—are offered for public competition in declamation. The contest will be held the second semester, and is open to students of Elocution only.

Military Prizes:

The Curators have provided an elegant silver cup to be awarded each year to the best drilled company.

A gold medal is usually given to the best drilled private, and a target medal to the best marksman.

Stephens Medal:

Founded by the Hon. James L. Stephens, of Columbia, and annually awarded for the best oration by a member of the Senior class. The prize consists of a book in defense of the Christian religion, and a gold medal, for the purchase of which the annual interest on \$500 is available.

William J. Bryan Prize:

Established by the Board of Curators through a generous donation by the Hon. W. J. Bryan, of Lincoln, Nebraska. The prize consists of \$17.50 in money or a medal of equivalent value, at the option of the successful contestant, and is awarded for the best essay on some subject pertaining to the Science of Government. In 1902-3 the William J. Bryan prize will be awarded for the best essay on "The Organization and Functions of State Governments in the United States," under the following conditions:

1. Competition is open to all students of the University.
2. The essays submitted shall contain not more than 2,500 words.
3. They must be in the hands of the Registrar of the University not later than 12 o'clock noon, of the first Saturday in May.
4. Each essay shall be signed with a fictitious name and be accompanied with a sealed envelope containing the real name of the writer and bearing the fictitious name on the outside.
5. An essay which is awarded a prize shall become the property of the University and be deposited in the Library.

William S. Woods Prize:

Established by the Board of Curators through a generous donation by the Honorable William S. Woods, of Kansas City, Missouri. The prize consists of \$50 in money and is awarded for the best essay on some subject pertaining to the history, people or products of Missouri. In 1901-2 the subject was "Pioneer Life in Missouri." In 1902-3 the William S. Woods Prize will be awarded for the best essay on "The Racial Elements in the Population of Missouri," under the following conditions:

1. Competition is open to Juniors of all Departments of the University. (The Committee on Graduation of each Department decides on the eligibility of competitors.)
2. The essays submitted shall contain not more than 3,000 words.
3. They must be in the hands of the Registrar of the University not later than 12 o'clock, noon, of the first Saturday in May.
4. Each essay shall be signed with a fictitious name, and be accompanied with a sealed envelope containing the real name of the writer and bearing the fictitious name on the outside.
5. An essay which is awarded a prize shall become the property of the University and be deposited in the Library.

SOURCES OF AID TO STUDENTS.**Fellowships:**

Fellowships are annually established in any subject where such additional teaching force may be required. Students holding these are put down in the list of the Faculty as Fellows. They are appointed by the Board of Curators, are required to teach five or six hours a week, and receive for this service \$200 with exemption from the payment of fees. They are required to devote the remainder of the time to graduate work approved by the Professor whom they assist and by the President of the University. They are not allowed to teach outside of the University. These Fellowships are conferred upon students who are working for higher degrees, and are not conferred upon undergraduates. Candidates for the Master's degree may not, except for extraordinary reasons, hold a Fellowship for longer than one year, nor candidates for the Doctor's degree for longer than three years. Students holding these Fellowships are not required to pay entrance, library, and incidental fees, or to make laboratory deposits in the laboratory in which they assist.

The Rollins Aid Fund:

Anthony W. Rollins, M. D., an honored citizen of Boone county, father of the Hon. Jas. S. Rollins, dying in 1845, left by his will the sum

of \$10,000 in trust for the purpose of educating such indigent youths of Boone county, both male and female, as might be unable to educate themselves. Three-fourths of the annual interest on the fund, according to the directions of the donor, is to be devoted to the education of the youths of Boone county, and the remaining one-fourth is to be added to the interest-bearing principal. The fund amounts now to about \$40,000. The President of the University is required, at each annual Commencement, to invite the citizens who may be present to subscribe for the enlargement of this fund. The beneficiaries of this charity are annually selected by the President of the University from the indigent youths of Boone county, male and female. In compliance with the wishes of the donor, the selection is made with reference to the moral as well as the intellectual qualities of the youths inclined to avail themselves of the advantages of the fund, preference being given, in the selection of boys, to such as evince an inclination to preach the gospel.

Applications for aid from the Rollins Aid Fund must be in writing; a blank form will be furnished by the Proctor, with whom it must be filed after it has been filled. The applicant must appear in person at the opening of the first semester, September 9, as no reservation will be made. No application should be made or will be received, unless the applicant has passed the examinations for entrance and has been duly admitted to the University. Hereafter a part of the money given to each beneficiary may be paid at the opening of the first semester and a part at the opening of the second semester.

Cadetships:

Each Senator and Representative of the General Assembly of Missouri may appoint a cadet and sometimes two cadets from his district. For further information see report of the Department of Military Science and Tactics.

Labor on Farm and Garden:

The sum of \$1,200 has been provided by the General Assembly for student labor on Farm and Garden during the present biennial period. Applicants should see the Dean of the College of Agriculture and Mechanic Arts.

SOCIETIES.

Literary and Scientific:

There are connected with the University at Columbia 15 societies for students—the "Graduate Club," the "Athenæan," the "Union Literary," the "Bliss Lyceum," the "Medical Society," the "Agricultural Society," the "Missouri State University Debating Club," the "New Era Debating

Club," the "Twentieth Century Debating Club," the "German Club," the "Horace Club," the "German Dramatic Club," the "French Dramatic Club," the "Sketch Club," and the "Zoological Field Club."

Young Men's Christian Association:

The object of this organization, which dates its existence in the University from January 18, 1890, is the same as in other institutions of learning, namely, the union of Christian students in Christian work. For the past three years the Association has been rapidly growing in strength, until now it is the largest college Association in the State, employing a general secretary who gives two-thirds of his time to this work. Its membership is composed of men representing all phases of college life—oratory, athletics, debate, journalism, and the glee club. The work has been rich in good results.

A meeting is held every Sunday in the University auditorium, addressed by students, professors, and prominent men from Columbia and other cities. This year over 120 men have met weekly in Bible classes led by students. A class of 20 meets each week to discuss foreign missions.

The Association owns a lot situated immediately in front of the University Campus, and as soon as sufficient money can be secured a building will be erected for the use of the Association. A State University is a strategic point for religious work and there are few ways in which one could make a better use of money than by giving toward the erection of this building.

At the beginning of each scholastic year a committee from the Y. M. C. A., to be recognized by their badges, meet students at the trains and freely render them valuable assistance by securing board, by introducing them to friends and to officers of the University, and by various acts of kindness. A letter sent in advance to the General Secretary of the Young Men's Christian Association, Columbia, Mo., will receive prompt and cheerful attention.

An Employment Bureau is maintained for the purpose of securing work for those students who find it necessary to work their way through the University. Many students make their way by their own efforts, but one should have at least \$35 or \$40 to start on, and upon which to fall back when work fails. The Bureau guarantees no one a position, but helps all who apply. Those who desire help of this kind should write to the General Secretary before coming to Columbia.

The Association conducts a lecture course for the purpose of general culture. The following was the course for 1901-2:

Whitney Mockridge Concert Co.

Professor John B. De Mott—"A Plea for Posterity."

Dr. Wm. A. Quayle—"King Lear."

Mr. Robert Burdette—"Rainbow Chasers."

Mr. Leland T. Powers—"Lord Chumley."

Young Women's Christian Association:

The Association, which is similar in its aims and methods to the foregoing, was organized April 2, 1891. Its object is the advancement of Christian work and the development of Christian character, particularly among the young women of the University. Its weekly meetings are held at 4 p. m. every Thursday, and daily prayer meetings at 8 a. m., and 1 p. m.

A four years' course in Bible study is carried on, as well as a class in Missions and a Personal Workers' class. The membership for this session is 110.

Both of these Associations have enjoyed hearty encouragement from all the authorities of the University.

Musical:

The students maintain a Military Band, and a Glee Club.

Alumni:

The Alumni Association is composed of all the graduates of the University. It holds an annual meeting on Tuesday of Commencement week, and is addressed in the University auditorium by an orator previously selected from its own body.

The objects of this society are the promotion of education, especially in the halls of the Alma Mater, the reunion of early friends and co-laborers in literary pursuits, and the revival of those pleasing associations which entwine themselves about university life.

The initiation fee for membership is \$1. This is the only charge imposed upon members, as the Association possesses an endowment of \$3,000, the income of which is used in defraying expenses of the annual meeting, etc. An initiation fee sent to S. F. Conley, Secretary, Columbia, Missouri, will lead to prompt enrollment.

The officers of the Association are: Woodson Moss, '74, President, Columbia; W. H. Lynch, '68, First Vice-President, Mountain Grove; C. L. Buckmaster, '75, Second Vice-President, Pilot Grove; W. H. Turner, '98, Secretary, Columbia; S. F. Conley, '90, Treasurer, Columbia.

The University publishes an alphabetical list of its graduates with

their addresses. Graduates are requested to furnish the Alumni Recorder, W. H. Turner, with information pertaining to such compilation.

A movement for a stronger organization of the Alumni has been inaugurated. The Alumni constitute, in fact, one of the largest elements in the life of the University, and, sufficiently organized, may become the most powerful agent in her development and prosperity. No effort should be omitted, both to strengthen the central organization at Columbia and to extend its branches throughout the State.

STUDENTS' PERIODICALS.

The students maintain and manage two periodicals. These are the *Independent* (weekly), and the *Savitar* (annual).

PHYSICAL TRAINING.

Gymnasium:

The Thirty-eighth General Assembly appropriated the sum of \$7,500 for the equipment of gymnasiums and \$1,200 for the improvement of the athletic grounds. Rooms in Academic Hall have been set aside for the gymnasiums proper, equipped with the necessary apparatus. Adjoining rooms have been fitted with baths and lockers.

Athletic Grounds:

In addition to the gymnasiums there are athletic grounds, with baseball and foot-ball fields. These are enclosed, a grand-stand has been erected, and tracks constructed for bicycling and running. In recognition of the generosity of members of the Rollins family in the construction of the athletic field it has been named by the Curators "The Rollins Athletic Field."

The University has also provided an excellent golf course upon the Agricultural College Farm.

Credit for Gymnasium Work:

A credit towards the A. B. degree of one hour for three hours' gymnasium work per week for each of four semesters is given to those students having the subject entered on their study cards, who satisfy the requirements.

Public Exercises:

In addition to the usual schedule of foot-ball and base-ball games there are gymnastic contests, strength tests, basket-ball contests, tennis tournaments and field days.

THE UNIVERSITY LIBRARY.

Staff.

James Thayer Gerould.....	Librarian
Walter King Stone.....	Assistant Librarian
Duncan Burnet	Head Cataloguer
Edith Allen Phelps	Cataloguer
Jessie M. Allen	Cataloguer
Francis Potter Daniels	Cataloguer
Helen Margaret Spicer	Copyist
Mary M. Butterfield	Copyist

The University Library comprises the General Library of the University, seventeen departmental Libraries and the Library of the School of Mines. They contain in all about 48,000 volumes. In addition to the above, students have access to the collections of the State Historical Society, which contain about 23,000 volumes. Until a suitable building is erected for its use, the General Library is housed in the west wing of Academic Hall. It is open for reference use from 8:30 to 12:30 A. M., from 1:30 to 5 P. M., and from 7 to 10 P. M., every week day, and from 2 to 5 P. M., on Sunday. All students have the privilege of reference use and of access to the stacks. The payment of a deposit of \$3 entitles any student to the right to draw out books from the Library for home use.

A card catalogue of the collections of books is in preparation. The University will expend for books and periodicals during the current biennial period about \$25,000. In addition to the General Library in Academic Hall, the Library contains, as before noted:

The Law Library, in the Law Building.

The Agricultural Library, in the Agricultural Building.

The Experiment Station Library, in the Agricultural Building and in various offices in other parts of the grounds.

The Chemical Library, in the Chemical Building.

The Geological Library, in the Museum Building.

The Engineering Library, comprising the collections of books on Civil, Electrical and Mechanical Engineering, in the Engineering Building.

The Medical Library, in the Medical Building.

The Classical Library, in Academic Hall.

The Political Science Library, in Academic Hall.

The Romance Library, in Academic Hall.

During the year the Librarian will deliver occasional lectures on reference work and bibliography.

B. SCHOOL OF MINES AND METALLURGY AT ROLLA.

See announcement of this Department, pp. 167-186.

DEPARTMENTS OF THE UNIVERSITY

The University comprises the following Departments:

I—Graduate Department.

II—Academic Department.

III—Department of Education.

IV—Department of Law.

V—Department of Medicine.

VI—Department of Military Science and Tactics.

VII—College of Agriculture and Mechanic Arts, embracing

A. *School of Agriculture.*

B. *Experiment Station.*

C. *School of Engineering.*

VIII—School of Mines and Metallurgy (at Rolla).

I. GRADUATE DEPARTMENT

I. ACADEMIC.

Admission:

Graduates of either sex of the colleges and universities comprising the Missouri College Union and of other reputable colleges and universities, and (in exceptional cases, by special permission of the Faculty) other persons of liberal education, are admitted to such graduate work as they are prepared for. Admission to the Graduate Department, however, shall not be understood as implying admission to candidacy for advanced degrees. The credentials of candidates for admission to this Department will be passed upon by the Dean.

Fellowships:

Fellowships are annually established where such additional teaching force is required. Holders of these Fellowships are required to teach five or six hours a week, and receive therefor \$200; and they are exempt from

the payment of fees and deposits. For further details, see page 52.

During the session of 1901-2 Fellowships were held in Anatomy, Chemistry, English, Germanic Languages, Greek, History, Latin, Mathematics, Pathology, Physics, Physiology, and Zoology.

Graduate Club:

A club has been organized by the graduate students for the purpose of furthering their social and scholastic interests in the University and of bringing themselves into touch with graduate student life elsewhere. This club has joined the Federation of Graduate Clubs of the leading American universities, and the Courses here offered are announced in the handbook published by the Federation.

Degrees:

1. *The Master's Degree.* Only such students are admitted to candidacy for the Master's Degree in Arts or Science as hold a Bachelor's Degree from the University of Missouri or from some other institution in which the requirements for the Academic Bachelor's Degree are equivalent to those of this University. Application for the Master's Degree will be considered on the basis of one year's graduate study in the University. Candidates for this degree are required to take at least twelve (12) hours a week throughout the scholastic year, at least six (6) of which must be chosen from the Courses *Primarily for Graduates*, and the remaining hours selected from those *For Graduates and Undergraduates*.

Candidates for the Master's Degree must choose their Courses from one general subject together with such related subjects as may be approved by the Professor in charge of the candidate's main work.

A creditable thesis evincing capacity for original research and power of independent thought, in the line of the student's previous work, shall be submitted on or before May 1 of the given year.

The subject of the thesis and the Courses chosen shall be laid before the Committee on Graduate Degrees on or before December 1 of each year.

At the close of the scholastic year the University Council may, on the report of this Committee, recommend to the Board of Curators for the Master's Degree such candidates as have satisfactorily fulfilled the conditions.

2. *The Doctor's Degree.*—The candidate will be expected to spend at least three years, or, if he have a Master's Degree equivalent in value to the Master's Degree of this University, at least two years in graduate study under University direction and in residence; but with the consent of the Faculty, one of these years may in either case be spent at some other institution, subject to the approval of the Committee on Graduate Degrees.

The candidate must have received from some university or college a Bachelor's Degree in Arts, Letters, Science, or Philosophy equivalent to the Bachelor's Degree of the University of Missouri, and must attain in graduate study at this University a high proficiency in one branch of learning, and a respectable proficiency in at least one other. He must submit a dissertation embodying the results of original investigation, and must pass examinations in his major and minor subjects.

Candidates who have satisfactorily met these conditions may be recommended for the Doctor's Degree in the manner prescribed above for candidates for the Master's Degree.

Courses of Instruction:

For Courses offered, see announcement of Academic Department.

II. COLLEGE OF AGRICULTURE AND MECHANIC ARTS.

SCHOOL OF AGRICULTURE.

Candidates for the degree of Master of Science in Agriculture are required to do one year's graduate work at the University. This work must consist of at least 10 hours a week throughout the year and the subjects selected must be advanced Courses, and must be approved by the Dean and the Committee on Graduate Degrees. For courses offered, see pp. 138-152.

SCHOOL OF ENGINEERING.

Graduate work in Civil, Electrical, and Mechanical Engineering is offered at Columbia to those who have finished the Undergraduate Courses in these subjects respectively with the degree of Bachelor of Science. Students that entering under these conditions have completed a year of graduate work, or two years of professional practice and graduate work *in absentia*, and passed satisfactory examinations thereon, and presented a thesis of real merit, will receive, according to the Course in which they have studied, the degree of Civil Engineer (C. E.), Electrical Engineer (E. E.), or Mechanical Engineering (M. E.). Graduate work in Hydraulic Engineering is offered to those who have completed the work in Civil and Mechanical Engineering.

The thesis subject shall be presented to the Committee on Graduate Degrees on or before November 1, and the thesis shall be presented to the same Committee on or before May 1, of the given year.

III. LAW.

One year of advanced work in Law is offered, leading to the degree of LL. M.

The course is open to graduates of the Law Department and of other law schools who have completed an equivalent course of study.

The object of this Course is to provide the practitioner with a more extended knowledge of important subjects embraced in modern law or cognate thereto than the limited time of the Undergraduate Course permits. It is also intended to afford him assistance in prosecuting the study of any particular subject or branch of law which he expects to follow in his future practice.

The course of instruction embraces lectures, recitations and independent investigation on the following subjects :

Constitutional Law, Corporations, Insurance, Trusts, Patents, Copyrights, Law of Homicide, Theory of Jurisprudence, Practice, Parliamentary Law, advanced work on Contracts and Evidence.

The student is allowed to select any special subject in law for extended examination, to be prosecuted concurrently with elected subjects embraced in the Course. His investigations are directed by the Faculty, who advise him of the books and cases to consult, and afford him assistance and counsel.

It is believed that many licensed attorneys will find it to their advantage to take as special students such instruction.

The text-books recommended for the Graduate Course are as follows : Cooley on Constitutional Limitations ; Lewin on Trusts, May on Insurance ; Walker on Patents ; Bishop on Criminal Law ; Thompson on Corporations ; Holland and Pollock on Theory of Jurisprudence ; Pattison's Forms ; Cushing's Parliamentary Law.

A thesis subject shall be selected and presented to the Committee on Graduate Degrees on or before November 1. The thesis shall be submitted to the same Committee on or before May 1, of the given year.

II. ACADEMIC DEPARTMENT

FACULTY.

- RICHARD HENRY JESSE, LL. D.,
President, and Professor of Ancient and Mediæval History.
- JOHN CARLETON JONES, A. B., Ph. D.,
Professor of Latin Language and Literature, and Dean of the Faculty.
- EDWARD ARCHIBALD ALLEN, Litt. D.,
Professor of English Language and Literature.
- HENRY CAPLES PENN, A. B., A. M.,
Assistant Professor of English Language and Literature.
- MILLARD LEWIS LIPSCOMB, A. M.,
Professor of Physics.
- WILLIAM GWATHMEY MANLY, A. M.,
Professor of Greek Language and Literature.
- *JOHN PICKARD, A. B., Ph. D.,
*Professor of Classical Archæology and the History of Art, and
Curator of the Museum of Classical Archæology.*
- FRANK THILLY, A. B., Ph. D.,
Professor of Philosophy.
- LUTHER MARION DEFOE, A. B.,
Assistant Professor of Mathematics.
- *SIDNEY CALVERT, B. Sc., A. M.,
Assistant Professor of Chemistry.
- ISIDOR LOEB, M. S., LL. B., Ph. D.,
Professor of History and Administration.
- BENJAMIN FRANKLIN HOFFMAN, M. L.,
Professor of Germanic Languages.
- HENRY MARVIN BELDEN, A. B., Ph. D.,
Assistant Professor of English Language and Literature.

*Absent during the session of 1901-2.

- RAYMOND WEEKS, A. B., Ph. D.,
Professor of Romance Languages.
- WILLIAM GEORGE BROWN, B. S., Ph. D.,
Professor of Chemistry.
- JOHN RUTLEDGE SCOTT, A. B., A. M.,
Professor of Elocution.
- CURTIS FLETCHER MARBUT, B. S., A. M.,
Professor of Geology and Mineralogy, and Curator of the Geological Museum.
- JOHN NELSON FELLOWS, A. M.,
Professor of Mathematics.
- GEORGE LEFEVRE, A. B., Ph. D.,
Professor of Zoology, and Curator of the Zoological Museum.
- EVA JOHNSTON, A. M.,
Assistant Professor of Latin.
- CHARLES WILSON GREENE, A. M., Ph. D.,
Professor of Physiology.
- CHARLES A. ELLWOOD, Ph. B., Ph. D.,
Professor of Sociology.
- RALPH EMERSON BASSETT, A. B., A. M.,
Assistant Professor of Romance Languages.
- MAX MEYER, Ph. D.,
Professor of Experimental Psychology.
- CLARK WILSON HETHERINGTON, A. B.,
Professor of Physical Training, and Director of Gymnasium and Athletics.
- PAUL BAUR, B. L., A. M., Ph. D.,
Acting Professor of Classical Archaeology and the History of Art.
- CHARLES THOM, A. B., Ph. D.,
Acting Assistant Professor (in charge) of Botany.
- HERMANN BENJAMIN ALMSTEDT, L. B., Ph. D.,
Assistant Professor of Germanic Languages.
- JESSE ELIPHALET POPE, M. S.,
Professor of Economics and Finance.
- OSCAR MILTON STEWART, Ph. B., Ph. D.,
Assistant Professor of Physics.

FREDERICK HANLEY SEARES, B. S.,

Professor of Astronomy, and Director of the Lows Observatory.

BENJAMIN BERNARD TURNER, B. Sc., Ph. D.,

Acting Assistant Professor of Chemistry.

RICHARD B. MOORE, B. S.,

Instructor in Chemistry.

WILLIAM SIDNEY DREWRY, A. M., Ph. D.,

Instructor in History.

RICHMOND LAURIN HAWKINS, A. B., A. M.,

Instructor in Romance Languages.

WINTERTON CONWAY CURTIS, A. B., A. M., Ph. D.,

Instructor in Zoology.

ROLLA ROY RAMSEY, A. B., A. M., Ph. D.,

Instructor in Physics.

GENERAL REGULATIONS.

Elective System:

All work in the Academic Department is elective. That is, the student makes such choice and combination of the studies offered in this Department as he desires, subject to certain restrictions explained below. Election is made for the entire session, except in the case of studies which are offered for only one semester. Those who elect such studies in the first semester must make a new election at the beginning of the second semester.

At the opening of the session each student makes out, on a blank form provided for the purpose, a list of the studies he wishes to pursue and deposits it with the Registrar. The list is then examined by a committee of the Faculty and if approved becomes the student's plan of work for the session (or for the semester—see preceding paragraph). If the plan presented is not in accordance with the regulations the student is notified of the fact by the Registrar and required to present another plan.

The student may not take more than 16 nor less than 12 hours a week (Physical Training not counted). But students who are candidates for the Life Certificate may take 3 hours of Industrial work in any year in addition to 15 hours of Academic work. This Industrial work does not count toward an Academic degree.

When a student has elected a course that runs through both semesters he must abide by his election unless he fails in the work the first semes-

ter or can secure the permission of the Faculty to abandon it or to make substitution at the end of the first semester.

Each Professor determines the special requirements for admission to the different Courses offered by him or his assistants. These requirements are for the most part stated in the detailed explanation of the Courses, pp. 66-94. The student is advised to consult each Professor under whom he wishes to take work before making his election.

Requirements for Graduation:

The degree of Bachelor of Arts (A. B.) is the only degree conferred in the Academic Department. In order to become a candidate for this degree a student must have met the following requirements:

1. He must have been regularly admitted to the Department. See page 30.

2. He must have completed at least twelve (12) hours in each of four subjects, and at least twenty-four (24) hours in a fifth subject, the subjects to be chosen from the following group:

Anatomy and Histology; Archæology and the History of Art; Astronomy; Botany; Chemistry; Economics; Elocution; English; Germanic Languages; Geology; Greek; History and Administration; Latin; Mathematics; Philosophy and Psychology; Physics; Physiology; Romance Languages; Pedagogy; Sociology; Zoology.

3. He must have completed at least one hundred and twenty (120) hours in all.

By "hour" is meant one hour a week for one semester.

Besides the subjects mentioned under 2 above, the following Courses in other Departments are open as electives to Academic students, and the candidate may present them (to an amount not exceeding nine (9) hours in all) as a part of the one hundred and twenty (120) hours required for graduation:

From the School of Agriculture: Entomology, for not more than six hours; Agricultural Chemistry, for not more than six hours.

From the Medical Department: Hygiene from the Third Year, for not more than three hours.

From the School of Engineering: Thermodynamics, Descriptive Geometry, Electricity and Magnetism, Astronomy, and Mathematical Theory of Stresses, each for not more than three hours; Applied Mechanics for not more than six hours.

From the Law Department: First year's work for not more than nine hours.

Academic students may elect Physical Culture three hours a week for four semesters, and receive a credit towards the Academic degree of one hour for each semester.

The candidate may also offer, as part of the one hundred and twenty (120) hours, work done in the Summer Session to an amount not exceeding the equivalent of twelve (12) hours for any one summer (see Appendix).

ACADEMIC COURSES IN DETAIL.

[Courses designated by a number with the letter a attached, thus: 4a, 6a, are given the first semester only. Those designated by a number with the letter b attached, thus: 4b, 6b, are given the second semester only. Those designated by a simple number are continuous Courses and are given both semesters.]

Anatomy and Histology

Assistant Professor JACKSON; Mr. POTTER; Mr. BELL.

For Undergraduates.

1a. Osteology. A complete unmounted skeleton is issued to every two students for their use during this Course. A deposit is required which is refunded when the skeleton is returned uninjured. *T. Th. S.*, at 8:30. Assistant Professor JACKSON.

2. Practical Anatomy. Beginning human dissection. Recitations, Section I, *M.*, Section II, *F.*, at 10:30. Laboratory, Section I, *M. W.*, Section II, *T. F.*, at 1:30. Assistant Professor JACKSON, Mr. POTTER.

3. Descriptive Anatomy. A recitation and demonstration Course correlated with Course 2. *M. W. F.*, at 8:30. Assistant Professor JACKSON.

4. Normal Histology. Each student prepares, stains and mounts permanently at least 50 specimens of normal tissue. Lecture, *W.*, at 10:30. Laboratory, Section I, *T. F.*, Section II, *M. W.*, at 1:30. Assistant Professor JACKSON; Mr. BELL.

5a. Neurology and Dissection. Anatomy of the central nervous system, and the completion of human dissection. *M. W. F.*, 1:30-4. Assistant Professor JACKSON.

5b. Topographical Anatomy. Study of the relational anatomy of the body by means of plane sections, etc. Lectures and laboratory, *M. W. F.*, 1:30-4. Assistant Professor JACKSON.

Primarily for Graduates.

6. Investigation. Problems for original research will be assigned in Anatomy or Histology. Hours to be arranged. Assistant Professor JACKSON.

Astronomy

Professor SEARES.

For Undergraduates.

1a. General Astronomy. Methods and fundamental facts underlying the science of Astronomy. Historical introduction, instruments, apparent motions of planets and stars, the solar system. *T. Th. S., at 9:30.*

1b. Modern Astronomy. Spectroscopic, photographic and photometric methods. Motions and distances of the stars; variable and temporary stars; double, multiple and binary stars; nebulae and clusters; cosmogony. *T. Th. S., at 9:30.*

Courses 1a and 1b are open to all students, and may be taken independently of each other, but if one is elected the other is advised. The class room work of both Courses is supplemented by practical exercises in the Laws Observatory.

2a. General Astronomy. Similar in extent to Course 1 but treated in a less elementary manner. *T. Th. S., at 10:30.*

Open to students of junior standing who have completed the courses in elementary Mathematics and General Physics.

3a. Observatory Practice. Practical work with the instruments of the Laws Observatory. Supplementary to Course 2a. *T. Th., 7:00-10:00 P. M.*

Open to students taking Course 2a.

4b. Spherical and Practical Astronomy. Lectures and recitations, *T. Th. S., at 10:30.* Observatory practice, *T. Th., 7:00-10:00 P. M.*

Open to students who have completed Differential and Integral Calculus and General Physics.

For Undergraduates and Graduates.

5. Advanced Spherical and Practical Astronomy. A continuation of Course 4b. Lectures and recitations. *S., at 8:30.* Observatory practice, *T. Th., 7:00-10:00 P. M.*

Open to students who have completed Course 4b.

6a. History of Astronomy. *M. W. F., at 10:30.*

Open to students who have completed Courses 1a and 1b or 2a.

7b. Method of Least Squares, with applications to the problems of Astronomy and Geodesy. *M. W., at 10:30.*

8b. Interpolation and Mechanical Quadratures. The formulæ of interpolation, numerical differentiation and integration developed and applied to the problems of Astronomy.

Courses 7b and 8b are given in alternate years. Course 7b will be given in 1902-3. Both courses are open to students who have completed Differential and Integral Calculus.

9. Celestial Mechanics. The Course consists of several subdivisions each of which occupies one semester. For 1901-2 the subdivisions were: 1. General Introduction. 2. Theory of Cometary Orbits. *M. W. F.*, at 9:30.

Open to students who have completed Analytic Mechanics and Elementary Differential Equations and who have a reading knowledge of French and German.

Primarily for Graduates.

10. Celestial Mechanics.

11. Research.

Courses 10 and 11 form a continuation of Courses 9 and 5 respectively. The subjects considered are determined by the needs of the students who present themselves. Hours and credit to be arranged with the instructor.

The Laws Observatory:

The practical work of the Department of Astronomy is carried on with the instruments of the Laws Observatory.

The observatory, a building 84 feet long from east to west, and from 14 to 30 feet wide, stands on an elevated portion of the campus. The equipment consists of a 7 1-2 inch equatorial refracting telescope by Merz and Soehne, of Munich, a 2 1-10 inch transit instrument by Brunner, of Paris, a 2 1-8 inch altitude and azimuth instrument by E. & G. W. Blunt of New York, a theodolite, sidereal and mean-time clocks, sidereal break-circuit chronometer, chronograph, sextants, micrometer, spectroscope, and outfit of smaller instruments.

Clocks and instruments are mounted on piers of solid masonry, isolated from the floors and walls of the buildings, and are provided with the usual electrical connections. The dome of the telescope is 18 feet in diameter. A cone 14 feet in diameter, revolving on balls, shelters the altitude and azimuth instrument.

In the year 1880, Dr. S. S. Laws, then President of the University, contributed largely from his private funds toward the improvement of the observatory building and instruments. In recognition of his generosity the board of curators named the observatory in his honor.

The Laws Astronomical Medal:

A medal, called the "S. S. Laws Astronomical Medal," is offered annually at Commencement to the student who stands highest in Astronomy, and has at the same time attained a high average of general scholarship. An original thesis written on some astronomical subject, and showing capacity for scientific investigation, is required.

Botany

Acting Assistant Professor THOM.

For Undergraduates.

1. General Botany. The fundamental processes of life will be studied in a series of plant types selected to present a developmental sequence. The forms selected so far as possible will be native to Missouri. *M. W. F.*, 1:30-4.

2a. Plant Histology and Microtechnique. Lectures and recitations on structure and physiology will be given in connection with the microscopic work. *T. Th. S.*, 8:30-11.

For Undergraduates and Graduates.

4a. Cryptogamic Botany. Studies in Algae and Fungi. *M. W. F.*, 8:30-11.

4b. Cryptogamic Botany. Bryophytes and Pteridophytes. *M. W. F.*, 8:30-11.

6. Systematic Botany and Oecology. Course 6 combines the principles of classification with the study of the biological relations of plants. *T. Th. S.*, 1:30-4:00.

8. Botanical Seminary. The Seminary offers to advanced students an opportunity to familiarize themselves with the current topics in Botany. *S.*, at 3.

9. Special. Special work in Natural History, or topics for investigation, will be assigned to such undergraduates as in the judgment of the instructor are prepared to do individual work. Course 9 offers instruction and training in methods of research to the advanced student and meets the needs of those who desire to follow particular lines of study. Topics and hours to be arranged with the instructor.

For Graduates.

10. Plant Physiology and Pathology. Facilities for work in the physiology of plants will be afforded after the completion of the new Horticultural Building but will not be available for the session of 1902-3. Five times a week.

11. Investigation. Botanical problems are assigned for training in methods of research. A thesis must be written at the completion of the work. Topics and hours to be arranged with the instructor.

Chemistry

Professor BROWN; *Assistant Professor CALVERT; Acting Assistant Professor TURNER; Mr. MOORE; Dr. REID; Mr. SHEPARD; Mr.

YANAGIWARA.

For Undergraduates.

2. General Inorganic Chemistry. Lectures, laboratory work and recitations. *Three times a week.*

*Absent during session of 1901-2.

3a or 3b. Organic Chemistry. (Introductory Course). Lectures, laboratory work and recitations. *Three times a week.*

5a or 5. Qualitative Chemical Analysis. Laboratory work, and lectures. *Three times a week.*

6a and 6b. Quantitative Chemical Analysis. Laboratory work. *Three times a week.*

7. Advanced Laboratory Work. *Daily.*

11a. Electro-Chemistry. Lectures and recitations. *Three times a week.*

12b. Technical Chemistry. *Three times a week.*

For Undergraduates and Graduates.

4. Organic Chemistry. Lectures, laboratory work, and recitations. *Three times a week.*

8b. Chemical Theory. Lectures and recitations. *Three hours a week.*

9a. History of Chemistry. Lectures and recitations. *Three hours a week.*

For 8b and 9a, 2 and 4 should be taken.

10. Physical Chemistry. Lectures, laboratory work, and recitations. *Three times a week.*

Primarily for Graduates.

14. Research. This will consist principally of original work, and investigations in Inorganic, Organic and Physical Chemistry and will be adapted in some measure to individual cases.

Course 2 is required of Engineering and Agricultural students.

Classical Archæology and the History of Art

*Professor PICKARD; Acting Professor BAUR.

For Undergraduates.

1. History of Modern Painting, particularly of French, English, and American Painting. *W. F., at 2.*

2. Classical Mythology. Studies from representative specimens of Greek and Roman Art. Recommended for Freshmen. *M., at 3.*

For Undergraduates and Graduates.

6. History of Greek Art. An introductory study of Assyrian and of Egyptian Art, followed by a special study of the development of Greek Architecture and Sculpture from the VII Century B. C. to the I Century A. D. *T. Th. S., at 2.*

* Absent during session of 1901-2.

7a. Mycenæan Art, or Art of Primitive Greece, discussing particularly the discoveries in Troy, Mycenæ, Tiryns, the Argive Heræum, and Crete. *M.*, at 2.

8b. Introductory study of Greek Vases and Vase Paintings. Rayet et Collignon's *La Ceramique Grecque* and Pottier's *Catalogue of the Louvre Vase Collections* will be used as reference books. *M.*, at 2.

9. Etruscan and Graeco-Roman Art. The study of Etruscan Art is based on Martha, "L'Art Etrusque." The study of Graeco-Roman Art is carried down to Byzantine times. *M. W.*, at 9:30.

10. Roman Life. A systematic study of the topography of Rome and of the extant remains particularly of Rome and Pompeii. *T. Th.*, at 9:30.

11. History of Renaissance Painting. *First semester*. Painting of the Netherlands and of Germany; *Second semester*, Italian Painting. *T. Th. S.*, at 4.

13. Masterpieces of Architecture, Sculpture, and Painting of Classical, Renaissance, and Modern times. The course will be fully illustrated with the stereopticon. *M.*, at 4.

Primarily for Graduates.

14. Topography and monuments of Athens, based on a careful study of Pausanias. *T. Th.*, at 8:30.

15. Archæological Seminary. Interpretation of monuments and discussion of disputed points in the history of art and artists.

Museum of Classical Archaeology:

An excellent beginning has been made in equipping a laboratory for the study of Classical Archæology. For this purpose the third floor of the west wing of Academic Hall is fitted up. It is now supplied with models of temples illustrating the three orders of Greek Architecture and with plaster casts of representative specimens of Greek and Roman sculpture. These are arranged chronologically, and on the walls are hung a large number of framed photographs of other works of classic art. The Museum also possesses about a thousand other photographs, a large and fine collection of lantern slides, and many plans and charts.

Renaissance and Modern Painting:

To illustrate the courses in Renaissance and Modern Painting a large number of carbon photographs and of photogravures of the masterpieces of Flemish, Dutch, German, Italian, French, English, and American painting have been framed and hung in the picture gallery near the Museum of Classical Archæology. A few of the best reproductions in color of famous paintings are also to be seen here. In addition to many other unframed photographs, the gallery also has an excellent collection of lantern slides, some of which reproduce the colors of the originals.

By the purchase, during the past year, of photographs, casts, and lantern slides the means of illustrating the various Courses have been very largely increased. This is specially true of Courses 1, 6, 10, 11, and 13.

Economics

Professor POPE.

For Undergraduates.

1. Elementary Economics. *First Semester*; Outlines of Economics. *Second Semester*: Economic History of England and America. Selected text-books, private readings, lectures. Must be preceded by History 1. and should be preceded or accompanied by History 2. *M. W. F., at 3.*

For Undergraduates and Graduates.

2. Science of Finance. Selected text-books, essays and lectures. Open to those who have had Course 1. *M. W. F., at 8:30.*

3. Economic Problems. Essays and lectures. As an introduction to this course, there will be a series of lectures on the theory and technique of statistics. Open to those who have had Course 1. *M. W. F., at 10:30.*

Primarily for Graduates.

4. Economic Theory. Private readings, essays and lectures. *Three hours a week.* Hours to be arranged.

5. Seminary. Open to graduates and those who, in the opinion of the instructor, are fitted for the work. *Three hours a week.* Hours to be arranged.

Elocution

Professor SCOTT.

1. *First Semester*: Foundation theory and practice of vocal culture and expression. Breathing for conscious voice-support; phonetics, applied to syllabic form and enunciation; stress, inflection, quantity, and quality; phrasing; movement and rhythmus; melody, intonation, and cadence; analysis of short prose and poetic passages, for the recognition and establishment of the correlation of utterance with thought and feeling. *Four sections*; *M. W. F., at 10:30 (II) and 2 (IV)*; *T. Th. S., at 9:30 (I) and 11:30 (III)*. Text-book: Raymond's Orator's Manual. *Second semester*: Principles of bearing, walk, and gesture; the practice of short oratorical extracts, with the study of the *rationale* of appropriate utterance and action. To be followed by the study of more extended passages and entire compositions, prose and poetic, as readings and recitations. *Four sections*: *M. W. F., at 10:30 (II) and 2 (IV)*; *T. Th. S., at 9:30 (I) and 11:30 (III)*. Text-book: Raymond's Orator's Manual.

2. Advanced work. The interpretative study of plays, scenes, poems, and imaginative literature generally. Selections will be made jointly by the Professor in charge and the class, from Shakespeare, Milton, Scott, Tennyson, Browning, Dickens, Poe, Ruskin, and other representative writers. The emotional and spiritual, as well as the intellectual, elements of literature will be the objects of study and embodiment. This Course is continuous through two semesters, and must be preceded by Course 1. *Two sections: T. Th. S., at 10:30 (I); M. W. F., at 11:30 (II).*

3. Teachers' Course. This Course is offered to students in the Department of Education, and counts toward the Academic degree and the Life Certificate to teach. It must be preceded by Course 1, and will comprise: (a) The criteria of vocal expression—time, pitch, quality, and force—with copious examples; (b) The method of teaching children to read. *One hour a week, for two semesters; W. at 3.* Text-book: S. H. Clark's *How to Teach Reading in the Public Schools*.

For 1903 three prizes in cash—one of \$25, one of \$15, and one of \$10—are offered for public competition in declamation. The contest will be held in the second semester, and is open to students of Elocution only.

English

Professor ALLEN; Assistant Professor PENN; Assistant Professor BELDEN;
Mr. JOHNSON.

For Undergraduates.

1. English Composition and Rhetoric. Detailed study and practice in Construction and the Kinds of Composition. Lectures, exercises, and themes. Penn's Outline and Exercises, and A. S. Hill's Principles of Rhetoric. Class-room study of literature illustrative of the different kinds of Composition. Section I, II, and V, *M. W. F., at 8:30*; Sections III and IV, *T. Th. S., at 8:30*; Section VI, *M. W. F., at 11:30*. Assistant Professors PENN and BELDEN, and Mr. JOHNSON.

(Recommended for the first year.)

2a. Higher Composition, expository and argumentative. *First semester, M. W. F., at 11:30*. Assistant Professor BELDEN.

(Must be preceded by 1 or its equivalent.)

3. English Literature. General View. *First semester*, Chaucer to Shakspere; *Second semester*, Milton to the present. Section I, *T. Th. S., at 9:30*; Section II, *at 10:30*. Professor ALLEN and Assistant Professor BELDEN.

(Recommended as preliminary to other Courses in Literature.)

4. English Literature. Nineteenth Century. *First semester*: The Romantic Revival (1789-1830). *Second semester*: The Scientific Move-

ment and its influence (1830-1890). Lectures. Class-room study of texts, parallel readings, and occasional essays. *T. Th. S., at 10:30.* Assistant Professor PENN.

10b. American Literature. (a) Sectional Development; (b) Growth of Nationality; (c) Present Tendencies. The leading writers in prose and verse will be considered first as to their intrinsic worth and secondly as illustrative of national development. *Second semester, M. W. F., at 11:30.* Assistant Professor BELDEN.

11. *First semester:* History of the English Language. Lectures and text-book. *Second semester:* Study of Modern Prose Style, based upon masterpieces of representative authors. Essays and reports. *T. Th. S., at 11:30.* Professor ALLEN.

For Undergraduates and Graduates.

5. English Literature. Eighteenth Century. *First semester,* Dryden and Pope; *Second semester,* Swift and the novelists. *W. F., at 9:30.* Assistant Professor BELDEN.

6. English Literature. Seventeenth Century, exclusive of the Drama. *W. F., at 9:30.* Assistant Professor BELDEN.

7. English Literature. Shakspeare. Eight to ten selected plays; class-room reading and interpretation; detailed study of style. *M. W. F., at 3.* Assistant Professor PENN.

8. English Literature. The English Drama. *First semester:* Chief Plays of Shakspeare, in approximate chronological order. A study of the development of Shakspeare's art and genius. *Second semester:* The English Drama (exclusive of Shakspeare) from its beginnings to the Restoration (1250-1660). Lectures. Selected plays, and reports; occasional essays. *W. F., at 10:30.* Assistant Professor PENN.

9. English Literature. Tennyson and Browning. Readings, class-room study and interpretation of texts, and occasional papers by members of the class. *W. F., at 10:30.* Assistant Professor PENN.

12. Anglo-Saxon. Prose and Poetry. *M. W. F., at 11:30.* Professor ALLEN.

13. Middle English. *W. F., at 8:30.* Professor ALLEN.

14a. The French Element in English. *First semester, W. F., at 9:30.* Professor ALLEN.

Knowledge of French and Latin necessary.

14b. Principles of English Etymology. *Second semester, W. F., at 9:30.* Professor ALLEN.

Primarily for Graduates.

15. Anglo-Saxon (Advanced Course). *First semester,* Beowulf; Anglo-Saxon grammar (phonology), and brief history of the language. *Second semester,* Cynewulf, and selected miscellaneous poems; history of Anglo-Saxon literature. *T. Th. S., at 3.* Assistant Professor PENN.

16. Gothic and Old Saxon. *First semester*: Gothic, with lectures on the phonology and inflections of primitive Germanic. *Second semester*: Old Saxon. *M. W. F., at 3.* Assistant Professor BELDEN.

Courses 5 and 6, and Courses 8 and 9, are given only in alternate years. Course 6 will be given in 1902-3. Students will be admitted only to such Courses as they are prepared for. They should in all cases consult the Professor before making choice of a Course.

A special medal, known as the "McAnally Medal," is offered for the best essay, thesis, or poem by a member of the Senior class. Subject for 1903, "The Literature of Missouri."

Geology and Mineralogy

Professor MARBUT.

For Undergraduates.

1. Physiographic Geology. This Course is designed both for those students who desire a general knowledge of the processes involved in the development of the earth, and as a foundation for those who intend to pursue the subject further. The earth is treated as an organism and the Course is intended to furnish a grasp of its main constituents and their distribution and arrangement as well as the processes which have produced and arranged them. It is primarily a study of evolution as applied to the earth. Lecture, *M., at 10:30*; Laboratory, *T. Th., 1:30-4.*

2. Physiography of North America and Europe. A detailed study of the morphology of the surface of these two continents. It is designed especially for students who intend to specialize in History, Economics or Sociology. *T. Th. S., at 8:30.*

3. Engineering Geology. This Course is intended to meet the geological needs of the engineer along several lines of his work. It will include the study of the rock-making and economically valuable minerals, rocks, geological structure, geological dynamics, the relation of Geology to topography, water supply, mineral deposits and river evolution. It is intended to equip the engineer with the Geology necessary to enable him to do the engineering work of a mining plant. *Three hours a week.*

4. Agricultural Geology. A course of study designed to illustrate the relation between Agriculture and Geology. Soils, fertilizers (mineral), structural material, water-supply, earth structure, composition, and morphology will all be considered in relation to their origin, development and utilization. *First semester, three hours a week.*

5a or 5b. Meteorology. Recitations, lectures and laboratory work. *Three hours a week.*

Facilities will be offered for work in mineralogy and petrology, to students prepared to do such work. It will be almost exclusively laboratory work.

For Undergraduates and Graduates.

8. Field Geology. The detailed study, with the preparation of reports and maps, of geologically important districts. The selection of the area to be studied may be made by the student with the approval of the Professor.

9. Geomorphology. Special field and laboratory study of land form.

Primarily for Graduates.

(See Graduate Circular).

Course 3 is required of students in Chemical Engineering, and Course 4 of Seniors in Agriculture.

Germanic Languages

Professor HOFFMAN; Assistant Professor ALMSTEDT; Miss KIRCHNER; Mr. HAUHART; Mr. PATZWALD.

For Undergraduates.

1. Beginning Course in German. Section I, *M. W. F., at 8:30*; Section II, *T. Th. S., at 8:30*; Section III, *M. W. F., at 10:30*; Section IV, *T. Th. S., at 9:30*. Assistant Professor ALMSTEDT; Miss KIRCHNER; Mr. HAUHART; Mr. PATZWALD.

Texts: Thomas' Practical Grammar, Vos' Materials for German Conversation, easy prose reading.

2. Course in German Reading, Syntax and Composition. *First semester*: Reading from authors like Storm, Hauff, Baumbach, Freytag; on the basis of the text, drill in grammar (questions and answers in German), German dictation, study of the German idiom. *Second semester*: Intensive composition work. This will lead to German theme-writing. Section I, *M. W. F., at 9:30*; Section II, *T. Th. S., at 11:30*; Section III, *T. Th. S., at 10:30*, Miss KIRCHNER; Mr. HAUHART; Mr. PATZWALD.

3. Advanced Reading Course. Primarily a course in prose reading. Works dealing with history, political economy, philosophy will serve as the basis of study; upon these, occasional paraphrases in German. This course will especially aid students who need German in their advanced work in subjects such as history, philosophy, etc. *M. W. F., at 11:30.*

For Undergraduates and Graduates.

4. Schiller. This Course will consist in the study of Schiller's *Jungfrau von Orleans*, *Braut von Messina*, *Wilhelm Tell*, *Wallenstein*; compo-

sition; lectures on Schiller's life and works. *T. Th. S., at 10:30.* Assistant Professor ALMSTEDT.

5. Goethe. In the first semester a careful study will be made of *Egmont*, *Tasso*, *Iphigenie*; the second semester will be given to the study of *Faust*. Essays written in German; lectures from time to time on other works of Goethe. The Course is conducted wholly in German, and requires, therefore, a knowledge of spoken German. *M. W. F., at 9:30.* Professor HOFFMAN.

6a. Deutsche Aufsätze und Stilübungen. A course intended primarily for teachers of German, or for students who purpose to become teachers. It consists of oral and written criticism of brief themes upon subjects suggested by the instructor. The work will be conducted in German. *T. Th. S., at 9:30.*

7. German Lyric Poetry of the Eighteenth and Nineteenth Centuries. An intensive study of representative poems; discussions, papers and lectures. This course will be conducted in German, and a knowledge of spoken German is, therefore, a prerequisite. *M. W. F., at 8:30.* Assistant Professor ALMSTEDT.

8a. German Romanticism. The reactionary causes in German life and literature, and foreign influences leading to romanticism, will be studied in lectures, papers and discussions. The tendencies, forms and productions of the movement will be studied in its principal representatives; special attention being given to the study of the novel. *T. Th. S., at 10:30.* Professor HOFFMAN.

8b. Grillparzer and Kleist. It is the purpose of this Course to study the drama of the early decades of the nineteenth century in its two best representatives. The social and political forces at work in Europe at this time will also receive attention. *T. Th. S., at 10:30.* Professor HOFFMAN.

Primarily for Graduates.

9. Pseudo-Classicism in German Literature. This Course is to acquaint the student with the important writings and writers of the pseudo-classic period; to give a clear idea of the character of epochs, and of the development and decline of literary tendencies, forms and ideals; to show the influences of political and religious history on the literature of this time. *T. Th. S., at 2.* Professor HOFFMAN.

10. Middle High German. This course will comprise a careful study of Middle High German phonology, inflections and syntax, as contained in Paul's *Mittelhochdeutsche Grammatik*; a study of Hartmann von Aue's *Der Arme Heinrich*, and *Gudrun*, noting differences in constructions, phraseology, and meaning of words, as compared with modern German; lectures on the literature of the period. *M. W. F., at 11:30.* Professor HOFFMAN.

11a. Historical German Grammar. This is especially adapted to those who are fitting themselves to teach German. A knowledge of Gothic, Old High German, and Middle High German, though very desirable, is not required. Text: Otto Behagel, *Die Deutsche Sprache* (Leipzig-Prag, 1901). *T. Th. S.*, at 11:30. Assistant Professor ALMSTEDT.

12b. Old High German. A study of Old High German phonology and forms; critical reading of Old High German texts. A knowledge of Gothic should precede this Course. Texts: Braune, *Althochdeutsche Grammatik*² (Halle, 1891); Braune, *Althochdeutsches Lesebuch*⁴ (Halle, 1897). *T. Th. S.*, at 11:30. Assistant Professor ALMSTEDT.

13. Seminar in Old High German. The exercises will lead the student to an appreciation of critical work, besides giving him a broader acquaintance with the language, literature, and culture of the Old High German period. Prerequisite: Course 12. Texts: same as in 12b, and MSD.³ (Berlin, 1892). *M. W. F.*, at 3. Assistant Professor ALMSTEDT.

Greek

Professor MANLY; Mr. JENKINS.

For Undergraduates.

1. Elementary Greek. *M. W. F.*, at 8:30. White's First Greek Book; Gleason's Gate to the Anabasis. This course is intended for university students who have had no opportunity of studying Greek in their preparatory work, or who have neglected to do so, and now desire to take up that study.

2. Xenophon's Anabasis. *T. Th. S.*, at 10:30. Goodwin and White's Anabasis; Pearson's Greek Prose Composition; Goodwin's Greek Grammar.

3a. Lysias' Select Orations. *M. W. F.*, at 9:30. Wait's Orations of Lysias; Bridgman's Parallel Exercises based on Lysias.

3b. Homer's Odyssey. *M. W. F.*, at 9:30. Perrin and Seymour's School Odyssey I-IV, IX-XII.

4a. Greek Tragedy. *T. Th. S.*, at 8:30. Sophocles' Oedipus Rex and Oedipus at Colonus.

4b. Demosthenes. Select Orations. *T. Th. S.*, at 8:30.

5b. Aristophanes. Selected Comedies. *T. Th. S.*, at 8:30.

6a. Greek Prose Composition. *Th. S.*, at 11:30. Careful study of Greek syntax by means of translations from English into Greek. Important for those who expect to teach.

7. History of Greece. *W. F.*, at 11:30. Bury's History of Greece with assigned readings in the larger histories and in translations of the Greek authors.

- 8a. Greek Mythology. *T.*, at 2.
- 9b. Greek Literature in English Translation. *T.*, at 2.
- 10a. New Testament Greek. *T. Th.*, at 2.
- 10b. Modern Greek. *T. Th.*, at 2.
- 11a. Herodotus. Rapid and extensive reading. *Th. S.*, at 11:30.
- 12b. Plato. Selections from the Dialogues. *Th. S.*, at 11:30.

For Undergraduates and Graduates.

13a. Greek Theater. Development of the theater, and discussion of disputed points in the structure of the theater and in the presentation of plays. Doerpfeld and Reisch's "Das Griechische Theater." *T.*, at 11:30.

14. Greek Life. Manners and Customs of the Ancient Greeks. Assigned readings and reports. Lectures illustrated by maps, charts, photographs, and stereopticon views. *W. F.*, at 2.

15. Homer's Iliad and Odyssey with lectures on the manners and customs of the Homeric period. *T. Th.*, at 3.

Primarily for Graduates.

16. Historical Greek Grammar. Two or three hours a week. Hours to be arranged.

17. Seminary in Greek Tragedy. Two or three hours a week. Hours to be arranged.

History and Administration

Professor LOEB; *Assistant Professor —————; Dr. DREWRY; Miss
ORGAN; Mr. SNIDER.

The Courses in History and Administration are divided into the two groups of introductory and advanced Courses. The introductory Courses 1 to 3 are intended to give a general survey of history and should be completed by all students who wish to take advanced Courses. Course 1 is required of all students who wish to take other courses in History, Administration, Economics or Sociology. Courses 11 to 16 are primarily for Graduates but may be elected by Undergraduates who have the necessary preparation. Students who wish to specialize in History are recommended to elect the course in Physiography of North America and Europe (Geology, course 2).

The following courses are offered:

For Undergraduates.

1. General History. A sketch of Oriental History followed by a general survey of European History. The Course presupposes such elementary knowledge as may be obtained from the study of Myers' Ancient

*To be appointed before the opening of the next session.

History and Mediæval and Modern History or their equivalent. Section I, *M. W. F.*, at 9:30; Section II, *T. Th. S.*, at 10:30. Dr. DREWRY and Mr. SNIDER.

2. English History. A general course with special reference to social and political development. Must be preceded by Course 1. *T. Th. S.*, at 8:30. Assistant Professor _____.

3. American History. A general survey from the discovery of America to the present time. Special attention will be given to the growth of political institutions. Must be preceded or accompanied by Course 2. *M. W. F.*, at 11:30.

For Undergraduates and Graduates.

4a. The Middle Ages and the Renaissance. A study of the conditions of Europe during the later Middle Ages and the rise and spread of Italian Humanism. *T. Th. S.*, at 9:30. Assistant Professor _____.

5b. The Era of the Protestant Reformation. This Course is a continuation of Course 4a. The causes of the religious reformation will be traced with special reference to its influence upon institutions. *T. Th. S.*, at 9:30. Assistant Professor _____.

6a. The Revolutionary Period, 1789-1815. The beginning of the Revolution in France, its progress and influence. *M. W. F.*, at 10:30. Assistant Professor _____.

7b. European History in the Nineteenth Century. This Course is a continuation of Course 6a. It will trace the policies and relations of European states since 1815 with special reference to the existing social and political institutions. *M. W. F.*, at 10:30. Assistant Professor _____.

8. Constitutional History of England. A detailed study of the development of the political ideas and institutions of the English people. *W. F.*, at 8:30. Assistant Professor _____.

9. Theory of Politics and Jurisprudence. *First semester.* Theory of Politics. A critical and historical study of the theories of the nature and origin of the state and an analysis of sovereignty. *Second Semester.* Theory of Jurisprudence. An introduction to legal science. The Course treats of the nature, sources and classification of law, and includes a general consideration of the general principles of private law. The nature and use of legal authorities will be discussed. *T. Th. S.*, at 3. Professor LOEB.

10. Comparative Constitutional Law. A comparative study of the Constitutional Law of the principal states of Europe and America. Particular attention will be given to the field of individual liberty defined in the Constitution of the United States, and interpreted in the decisions of the Supreme Court. *M. W. F.*, at 3. Professor LOEB.

Primarily for Graduates.

11. Comparative Administrative Law. A study of the nature and functions of the administration and the control exercised over it in the United States, England, France and Germany. Governmental structure will be studied in detail and local government will be considered with special reference to recent development. Given in 1902-3 and alternate years thereafter. *T. Th. S., at 11:30.* Professor LOEB.

12a. Colonial Administration. The history and character of the government of colonies. The modern systems of colonial administration will be considered. Given in 1903-4 and alternate years thereafter. *T. Th. S., at 11:30.* Professor LOEB.

13b. Municipal Government. A sketch of the history of municipalities followed by a study of the organization and functions of cities in Europe and the United States. Given in 1903-4 and alternate years thereafter. *T. Th. S., at 11:30.* Professor LOEB.

14. Seminary in European History. A course of training in historical research. May be elected for 2, 3 or 4 hours. Assistant Professor

15. Seminary in American History. An investigators' course. In 1902-3 special topics in Missouri history will be studied from the sources. May be elected for 2, 3 or 4 hours. Dr. DREWRY.

16. Seminary in Administration. A course for the investigation of administrative organization and functions. In 1902-3 topics in Missouri administration will be studied from the sources. May be elected for 2, 3 or 4 hours. Professor LOEB.

Latin

Professor JONES; Assistant Professor JOHNSTON; Miss MACMILLAN.

For Undergraduates.

1. Sallust and Vergil, with sight-reading. Three Sections. Section I, *M. W. F., at 9:30*; Section II, *T. Th. S., at 9:30*; Section III, *M. W. F., at 8:30.* Professor JONES, Assistant Professor JOHNSTON, Miss MACMILLAN.

Text-books: Herbermann's Catiline; Greenough and Kittredge's Vergil; Allen and Greenough's Latin Grammar; Guerber's Myths of Greece and Rome.

2. Latin Prose Composition (Elementary Course). *W. or S., at 9:30.* Assistant Professor JOHNSTON.

3. Livy and Horace. Two Sections. Section I, *M. W. F., at 11:30*; Section II, *T. Th. S., at 11:30.* Professor JONES and Assistant Professor JOHNSTON.

Required: Latin 1.

Text-books: Lord's Livy; Shorey and Kirkland's Horace; Allen and Greenough's Grammar.

4. Latin Prose Composition (Second Course). *T. or F., at 11:30.* Assistant Professor JOHNSTON.

Required: Latin 2.

Text-book: Gildersleeve and Lodge's Latin Composition.

5. Roman Public and Private Life. (a) Cicero and Pliny, selected letters; (b) Juvenal and Martial. *M. W. F., at 8:30.* Professor JONES.

Required: Latin 1, 3.

6. Catullus, the Elegiac Poets and Martial. *T. Th. S., at 8:30.* Professor JONES.

Required: Latin 1, 3.

7. Rapid Reading. *T. Th. S., at 8:30.* Professor JONES.

Required: Latin 1, 3. (Not given in 1902-3.)

For Undergraduates and Graduates.

9. Roman Drama (Plautus and Terence). *T. Th. S., at 3.* Assistant Professor JOHNSTON.

Required: Latin 1, 3.

11. Latin Literature. Characteristic Selections. *T. Th. S., at 11:30.* Professor JONES.

Required: Latin 1, 3, 5, or equivalent.

13. Latin Prose Composition (Advanced Course). *T. Th., at 8:30.* Assistant Professor JOHNSTON.

Required: Latin 2, 4.

Primarily for Graduates.

14. History of the Latin Language. Sounds, inflections, syntax. *M. W. F., at 10:30.* Professor JONES.

15. Seminary. Critical study of a selected author. For the session of 1902-3 Lucretius, Book III, has been chosen. Hours to be arranged. Professor JONES.

Courses 1, 2, 3, 4, 5, 6, 7 are primarily for Undergraduates; Courses 9, 11, 13 for Undergraduates and Graduates; Courses 14 and 15 are primarily for Graduates, but are open to Undergraduates of special attainments.

Mathematics

Professor FELLOWS; Assistant Professor DEFOE; Miss BECKER, Miss HATCHER, Mr. HAMLIN, and Mr. INGOLD.

For Undergraduates.

1. Trigonometry. Solid Geometry and Analytic Geometry. *M. W. F., at 11:30 and T. Th. S., at 11:30.* Assistant Professor DEFOE; Miss BECKER; Miss HATCHER and Mr. HAMLIN.

2. Advanced Algebra. *M. W. F.*, at 9:30, *T. Th. S.*, at 10:30, and *M. W. F.*, at 10:30. Professor FELLOWS; Miss HATCHER and Mr. INGOLD.

3. Analytic Geometry and Differential and Integral Calculus. *T. Th. S.*, at 8:30. Assistant Professor DEFOE and Mr. INGOLD.

16. Analytic Geometry and Differential and Integral Calculus. *M. T. W. Th. F. S.*, at 8:30. Professor FELLOWS and Mr. INGOLD.

Courses 3 and 16 are open to students who have taken Course 1.

4. The Elements of Mechanics. *T. Th. S.*, at 9:30. Professor FELLOWS.

Course 4 is open to students who have taken Course 3.

For Undergraduates and Graduates.

5. Differential and Integral Calculus. *T. Th. S.*, at 9:30. Professor FELLOWS.

Course 5 is open to students who have taken Course 3.

6. Theory of Equations and Determinants. Introduction to the Theory of Invariants. *M. W. F.*, at 9:30. Professor FELLOWS.

7a. Infinite Series and Products. *M. W. F.*, at 8:30. Professor FELLOWS.

7b. Solid Analytic Geometry. *M. W. F.*, at 8:30. Professor FELLOWS.

8. Advanced Analytic Geometry. *M. W. F.*, at 11:30. Assistant Professor DEFOE.

9. Problems in Mechanics. *M. W. F.*, at 4. Assistant Professor DEFOE.

10. Differential Equations. *T. Th. S.*, at 8:30. Professor FELLOWS.

Primarily for Graduates.

11. Spherical Harmonics and Potential Function. *M. W. F.*, at 10:30. Professor FELLOWS.

12. Theory of Functions (Introductory Course). *T. Th. S.*, at 4. Assistant Professor DEFOE.

13. Theory of Functions (Second Course). *M. W. F.*, at 3. Professor FELLOWS.

14. Modern Algebra; hour to be selected. Professor FELLOWS.

15. Advanced Mechanics. *T. Th. S.*, at 9:30. Assistant Professor DEFOE.

Philosophy and Experimental Psychology

PHILOSOPHY.

Professor THILLY.

For Undergraduates.

1. Logic. A study of the fundamental principles of deductive and inductive inference and their practical application, together with an examination of the most general fallacies committed in reasoning. *W. F., at 10:30.*

2a. Ethics. An examination of the basal concepts of ethics: the nature of ethics; theories of conscience; the psychology of conscience; theories of the highest good; critique of hedonism; energism; egoism and altruism; optimism and pessimism; character and freedom. *T. Th. S., at 9:30.*

2b. Practical Ethics. Application of the principles underlying conduct. The following topics will be discussed: virtues and vices; self-control; the bodily life; the economic life; the spiritual life; the love of honor; benevolence; justice; charity; veracity; the Greek ideal of conduct; the primitive Christian ideal; the modern ideal. *T. Th. S., at 9:30.*

3. The Problems of Philosophy. A consideration of the fundamental problems of philosophy, and their solution. The following subjects will be taken up: the nature of philosophy; its relation to the sciences and religion; materialism; dualism; spiritualism; parallelism and monism; atomism; mechanism; evolutionism; theism; pantheism; empiricism; rationalism; scepticism; criticism; realism; idealism. *W. F., at 2.*

For Undergraduates and Graduates.

4. History of the Development of Thought. The evolution of thought will be traced from the early Greek times down to the present. Particular stress will be laid on the following movements: Greek and Roman philosophy; the Jewish religion; primitive Christianity; Gnosticism; the Christian Fathers; Scholasticism and Mysticism; the Renaissance and Reformation; the Rationalists; the Empiricists; the Critical philosophy of Kant; the post-Kantian Idealists; Herbart and Schopenhauer; the Positivists; the philosophy of evolution; Lotze, Fechner, and Hartmann. *T. Th. S., at 10:30.*

5. Advanced Ethics. A critical study of modern ethical theories, with a view to reaching an independent philosophy of conduct. *T. Th. S., at 11:30.*

Primarily for Graduates.

6. The Philosophy of Arthur Schopenhauer. An examination and criticism of Schopenhauer's system as presented in his main works:

Ueber die vierfache Wurzel des Satzes vom zureichenden Grunde; Die Welt als Wille und Vorstellung; Die beiden Grundprobleme der Ethik. This course is open only to students who have had the necessary preparation in Logic, Psychology, Ethics, and the History of Philosophy, and possess a reading knowledge of German. *T. Th. S., at 2.*

EXPERIMENTAL PSYCHOLOGY.

Professor MEYER.

For Undergraduates.

1. Psychology. Introductory Course. This course is intended to give a general survey of the whole field of Psychology, either as a part of a liberal education or as a preparation for professional study in Education, Law, or Medicine. The course covers the following ground: Structure and function of the sense organs and the nervous system. Sensations; their classification and analysis. Perception of space and time. Movement and action. Psychophysics. Attention. Memory and the association of ideas. Illusions. Affection and feeling. Emotion and sentiment. Will. Sleep and dreams. Hypnotism. Insanity. Students who take this course must have had some instruction in physics; at least one year of high school physics. Those who take Course 1 are advised to take at the same time or later a Laboratory Course 2. *T. Th., at 2.*

2a, 2b. Psychological Laboratory. The student is here given an opportunity of making such experiments as can not be successfully performed in the class room. *One hour.* Time to be arranged.

3a. Pedagogical Psychology and Child Study. *M. W. F., at 3.*

3b. Pedagogical Psychology and Child Study. *M. W. F., at 8:30.*

For Undergraduates and Graduates.

These courses are open only to students who have had an introductory course in General Psychology.

4a, 4b. Aesthetics (Psychological Theory of Art). *First semester,* Psychological Theory of Music. *Second semester,* General Aesthetics on a Psychological Basis. Either one of these semester courses may be taken alone. *T. Th. S., at 3.*

5a. Advanced Psychology. Discussion of the general principles of scientific investigation. Application of these principles in the criticism of modern psychological theories and problems. *M. W. F., at 8:30.*

6b. Mental Development in the Child and the Race. Experimental methods of child study. Dawning intelligence during animal infancy. Experiments upon the mental processes of animals. Instinct and psychological heredity. Theories of mental evolution. *M. W. F., at 3.*

Primarily for Graduates.

7. Psychological Seminary and Advanced Laboratory Work. Critical reading of recent literature. Discussion of special problems and theories. Research work.

Physics

Professor LIPSCOMB; Assistant Professor STEWART; Dr. RAMSEY; Mr. SUMMERS.

For Undergraduates.

1. General Physics. Lectures and recitations: Section I, W. F., at 9:30; Section II, Th. S., at 4. Laboratory: Section I, M., 9:30-12; Section II, M., 1:30-4; Section III, W., 1:30-4; Section IV, F., 1:30-4. Profess LIPSCOMB and Mr. SUMMERS.

2. Experimental Physics. This Course is offered for the benefit of those who wish to acquire some knowledge of the simpler phenomena of Physics and who do not wish to pursue the subject further. Completion of this Course does not qualify one to take Course 4 or any subsequent Course. These lectures constitute a part of Course 3, but credit for Course 2 can not be applied to count on Course 3. Lectures, T. Th., at 1:30. Assistant Professor STEWART.

3. General Physics. A longer elementary Course. An elementary knowledge of Trigonometry is required. Experimental lectures, T. Th., at 1:30. Recitations: Section I, T. Th., at 9:30; Section II, M. F., at 9:30; Section III, T. Th., at 10:30. Laboratory: Section I, T. Th., 2:30-5; Section II, W. S., 9:30-12; Section III, M. F., 1:30-4; Section IV, W. S., 1:30-4. Assistant Professor STEWART and Dr. RAMSEY.

4. Electrical Measurements. Lectures and laboratory work. M. W. F., at 1:30. Assistant Professor STEWART and Dr. RAMSEY.

For Undergraduates and Graduates.

5. Theory of Light. Calculus required. Based on Preston's Theory of Light. Lectures and Recitations. *Three hours.* Assistant Professor STEWART.

6. Theory of Heat. Calculus required. Lectures and Recitations. *Three hours.* Dr. RAMSEY.

7. Theory of Electricity and Magnetism. Calculus required. Differential Equations recommended. *Three hours.* Assistant Professor STEWART.

8b. History of Physics. *Two hours.* Professor LIPSCOMB.

9. Advanced work in General Physics. This Course, largely laboratory work, will be adapted to meet the needs and attainments of the

individual student. The student may be assigned a definite problem, the literature of which must be studied and the experimental work performed with the care of original research. *Two to six hours.* Assistant Professor STEWART and Dr. RAMSEY.

10. Seminary. Critical reading and discussion of current research work in Physics. A colloquium in which all members of the teaching staff of the department and students of sufficient attainments take part. *One hour.*

Primarily for Graduates.

11. Research work. *Hours to be arranged.* Assistant Professor STEWART.

Course 1 is required of Medical and Agricultural students; Course 3 is required of students in Engineering.

Physiology

Professor GREENE; Dr. GUTHRIE; Mr. MOORE.

For Undergraduates.

1a or b. Elementary Physiology. A lecture and demonstration Course open to all students. Lectures. *T. Th., at 8:30.* Demonstration; Section I, *T., 9:30-12*; Section II, *T., 1:30-4.*

Credit in this Course will not be accepted as a part of the requirements for a major in Physiology, nor as Physiology required in the Medical Department.

2. Experimental Physiology. This Course gives a detailed survey of the subject of Animal Physiology. The instruction in the lectures and recitations is based upon a general background of laboratory experience. Sets of apparatus are provided and selected experiments illustrating the facts and fundamental principles of the subject are performed by the individual student under the personal supervision of the instructors. Lectures, *M. W., at 8:30.* Laboratory: Section I, *M. W., 9:30-12*; Section II, *M. W., 1:30-4:00.*

Courses in General Biology, Chemistry, Physics, Anatomy, Histology, German and French are strongly recommended as preparation for this Course. General Biology may be counted toward an elective in Physiology.

For Undergraduates and Graduates.

3a. Comparative Physiology. The principles of Physiology illustrated by the simpler forms of life. Lecture, *F., at 8:30*; Laboratory: Section I, *F., 9:30-12*; Section II, *F., 1:30-4:00.*

4b. Pharmacology. This Course presents the physiological action of chemicals. The laboratory experiments are distributed to groups of students and each group is required to demonstrate to other members of the Course. Lecture, *F., at 8:30*; Laboratory, *F., 9:30-12.*

5b. Chemical Physiology. Three times a week. Lecture, *S.*, at 8:30. Laboratory hours to be arranged.

6. Advanced Physiology. Special Course open to students who have completed Course 2. Throughout the year. Hours to be arranged.

Primarily for Graduates.

7. Investigation. Opportunity is here offered for research into questions of current physiological interest. Problems will be assigned according to the individual needs of the student. Hours to be arranged.

8. Physiological Seminary and Journal Club. *T.*, at 4.

Romance Languages

Professor WEEKS; Assistant Professor BASSETT; Mr. HAWKINS.

FRENCH.

For Undergraduates.

1. Elementary Course. French. Prose and Composition. Grandgent's Short French Grammar, Super's Reader. Section I, *T. Th. S.*, at 8:30; Section II, *M. W. F.*, at 8:30; Section III, *M. W. F.*, at 10:30; Section IV, *T. Th. S.*, at 9:30. Assistant Professor BASSETT and Mr. HAWKINS.

2. Modern Fiction and Plays. Composition, sight-reading. This Course is meant for the second year study of French. Much ground is covered, and considerable attention is paid to pronunciation. Several of the books read are: One of Erckmann-Chatrian's better stories; Lamartine's *Jeanne d'Arc*, Bornier's *La Fille de Roland*; Sandeau's *Mademoiselle de la Seigliere*; Augier's *Le Fils de Giboyer*; Theuriet's *L'Abbe Daniel*; Rostand's *La Princesse Lointaine*. *M. W. F.*, at 9:30. Mr. HAWKINS.

4. A Course parallel to the second year's work under 2 is given, intended especially for training in conversation and composition. Besides some of the texts mentioned in 2 a number of standard novels and plays are read with reports and discussions in French. *M. W. F.*, at 10:30. Professor WEEKS.

6. The French Drama. Reading, reports, and lectures. In this Course the development of the drama and the theatre in France will be studied systematically, with some attention to the conditions of the drama in other countries. About fifteen representative plays, selected from the 17th, 18th, and 19th centuries, will be analyzed and discussed. The instructor will feel free to devote a portion of the year, if desirable, to some other branch of French literature. *M. W. F.*, at 9:30. Assistant Professor BASSETT.

8. General View of French Literature. A great deal of ground is covered in this Course; much pronouncing is done, very little translation.

The first semester is devoted to the 17th and 18th centuries. One or more plays of the great classical dramatists are read, together with several orations of Bossuet. The second semester is devoted to the 19th century. *T. Th. S., at 9:30. Professor WEEKS.*

For Undergraduates and Graduates.

9. French Literature in the Eighteenth Century. Lectures, readings, and reports. The first semester is occupied with the study of Voltaire and his contemporaries, chiefly the former—his life and character, his ideas and aims, and the nature and extent of his influence in France and abroad. The second semester treats of the drama of the period, tracing its evolution from Racine to the death of Beaumarchais. *M. W. F., at 9:30. Professor WEEKS.*

Courses 9 and 10 are given in alternate years.

10. The Seventeenth Century. An attempt is made in this Course to obtain a general view of the classic period of French Literature. Especial attention is paid to the development of French prose. There is considerable outside reading, with written reports from time to time. Selections from nearly all the great writers of the seventeenth century will be read. The Course is conducted in French. *T. Th. S., at 10:30. Professor WEEKS.*

Primarily for Graduates.

11. The Sixteenth Century. Lectures, readings, and reports. The Course includes the period between the close of the literature of the Middle Ages and the first years of the seventeenth century, with especial attention to the intellectual forces set in motion by the Renaissance and the Reformation in France. An attempt will be made to show the growth of literary reform to fixed standards. Some knowledge of the political history of the period will be indispensable. The first semester will be given to a general survey of the period in question. The second semester will deal chiefly with Montaigne and Rabelais, making a careful study of selected portions of their works, and of the influence and significance of their thought. *T. Th. S., at 2. Assistant Professor BASSETT.*

12. Old French. Paris and Langlois' *Chrestomathie*, Le *Covenant Vivien*, and *Aliscans* will be read, in whole or in part. The Course is conducted entirely in French.

Although this Course is intended for Graduates, Seniors who have taken with high credit the preceding work and who are making a specialty of Romance Languages, are occasionally allowed to elect it, since it can be pursued advantageously for two successive years. *M. W. F., at 10:30. Professor WEEKS.*

ITALIAN.

For Undergraduates.

15. Beginning Course. Grammar, reading, composition. Open only to those who have taken Course 1 or its equivalent. The object of the Course is to obtain an easy reading knowledge of modern Italian, and to this end much ground is covered. Careful attention is paid to pronunciation, and as soon as possible students begin to read aloud without translation. The books used are: Grandgent's Grammar, Bowen's Reader, and specimens of modern prose in fiction and drama. *T. Th. S., at 11:30.* Assistant Professor BASSETT.

For Undergraduates and Graduates.

16. Advanced Course. The Sixteenth Century and Dante. Open to Seniors and Graduates who have had at least two years of French, and who possess a fluent reading knowledge of modern Italian. The purpose of the course is to take as comprehensive a view as is practicable of the classical literature of Italy. The work studied will be mostly verse, but outside prose reading will be expected. During the first semester Machiavelli's *Il Principe*, Tasso's *Gerusalemme Liberata*, and portions of Ariosto's *Orlando Furioso* will be read. The second semester will be devoted mainly to the study of Dante and the *Divina Commedia*. *T. Th. S., at 9:30.* Assistant Professor BASSETT.

SPANISH.

For Undergraduates.

18. Beginning Course. This Course is parallel to the corresponding one in Italian, and, as far as possible, the same methods are employed. Emphasis is laid on a careful knowledge of the leading facts of the language. The books used are Edgren's Grammar, and Fontaine's *Doce Cuentos Escogidos* (W. R. Jenkins), followed by specimens of modern prose in fiction and drama. *T. Th. S., at 10:30.* Assistant Professor BASSETT.

19. Advanced Course. The Nineteenth Century and Cervantes, Reading, composition, lectures. The Course deals chiefly with prose selected with the twofold aim of promoting acquaintance with some of the most notable works of Spanish fiction, and of furthering the better acquisition of the language as a means of expression. The first semester will be taken up with selected works of representative authors of the nineteenth century, as Caballero, Alarcon, Valera, Galdos; while the second semester will be devoted chiefly to Cervantes, *Don Quixote* and *Novelas Ejemplares*. *M. W. F., at 11:30.* Assistant Professor BASSETT.

PHONETICS.

Primarily for Graduates.

20a. General Introduction to Philology. An effort is made in this Course to study the phenomena of speech sounds from a physiological standpoint. The University has established a laboratory of Experimental Phonetics for the more accurate study of the living speech. *M. W. F., at 2.* Professor WEEKS.

21. Seminary. *Two hours a week.*

An opportunity is here given for advanced work in special subjects.

Sociology

Professor ELLWOOD.

For Undergraduates.

1. Elementary Sociology. Lectures on certain fundamental social problems, as *e. g.* the origin and evolution of the family, the growth, of population, immigration, the race problem, the growth of cities, the nature of society, etc. Study by the class of special subjects for investigation. *M. W. F., at 9:30.*

2. The Social Teachings of Jesus. A lecture course open to all students of the University. *One hour a week.*

3a. Modern Philanthropy. Lectures on the social treatment of the dependent and defective classes, management of state institutions, etc. Reports by the class on special subjects of investigation. *T. Th. S., at 9:30.*

3b. Criminal Sociology. Lectures on criminal anthropology and on the social treatment of criminals. *T. Th. S., at 9:30.*

4. Advanced Sociology. Lectures, discussions, and reports on special investigations by the class. *T. Th. S., at 11:30.*

Primarily for Graduates.

5a. Ethnology. A study of the evolution and relations of the different races of mankind. *M. W. F., at 10:30.*

5b. Race Psychology. A study of the comparative psychology of races as shown in their customs, institutions, and social organization. *M. W. F., at 10:30.*

6a. Psychological Sociology. A critical study of the writings of Tarde, Le Bon, and Baldwin, with some attempt to make use of psychological principles in the interpretation of social phenomena. *M. W. F., at 2.*

7b. History of Social Philosophy. Lectures on the development of social thought from Aristotle to the present, especially since the time of Comte. Assigned reading. *M. W. F., at 2.*

8. Sociology of Religion. A study of religious phenomena from the sociological standpoint. Not given 1902-3.

9. Seminar. Special training in sociological investigation and research. *Two, three, or four hours credit.*

No Course in Sociology except Course 2 is open to Freshmen.

To all other Courses in Sociology Course 1 in History is prerequisite.

Zoology

Professor LEFEVRE; Dr. CURTIS; Mr. GARY.

For Undergraduates.

1. General Biology. A Course intended to give a general survey of the field of biological science, and to familiarize the student with a typical series of living forms. In the laboratory the student studies, by means of the microscope and dissection, selected animals and plants, from the simpler forms, such as amœba and the yeast plant, to the complex, such as the earthworm, the fern, the frog, and the flowering plant. The main object in view is to train the student in the exercise of his powers of observation, and at the same time to lay the foundation of the general principles of biological science, either as part of a liberal education, or as preparation for professional study. Lecture, *F.*, at 11:30; Laboratory, Section I, *M. W.*, Section II, *T. Th.*, at 1:30. Dr. CURTIS and Mr. GARY.

2. Comparative Anatomy of Vertebrates. A comparative study of the structure of a series of Vertebrates. Lecture, *S.*, at 11:30; Laboratory, *T. Th.*, at 1:30. Professor LEFEVRE.

3. Comparative Anatomy of Invertebrates. A comparative study of the structure of a series of Invertebrates. Lectures and Laboratory, *T. Th. S.*, 10:30-12:30. Dr. CURTIS.

4b. Embryology of Vertebrates. The development of the chick is studied in the laboratory, and the observations there made are used as a basis of comparison with the development of higher forms. Lecture, *T.*, at 8:30; Laboratory, *T.*, at 9:30; *Th.*, at 8:30. Professor LEFEVRE.

For Undergraduates and Graduates.

5a. Embryology of Invertebrates. A study of the development of representative forms from the principal phyla of the Invertebrates. Lecture, *M.*, at 11:30; Laboratory, *W. F.*, at 8:30. Dr. CURTIS.

6. Cytology. A study of the cell, with special reference to problems of development and inheritance. Cytological technique. Lecture, *M.*, at 9:30; Laboratory, *W. F.*, at 9:30. Professor LEFEVRE.

7a. Principles of Zoology. A Course of lectures designed to cover the main principles underlying zoological science. Collateral reading in

the writings of Darwin, Huxley, Spencer, Romanes, Galton, Weismann, Hertwig, Brooks and others. *T. Th.*, at 11:30. Professor LEFEVRE.

Primarily for Graduates.

8. Research. Special investigation of unsolved problems of Zoology in which the student is trained in the exercise of original observation and thought. A reading knowledge of French and German is required. Hours will be arranged in accordance with the requirements of individual students.

9. Seminary. Meetings at which special subjects of zoological investigation are reported and discussed by instructors and students. Each student is required to give at least six lectures during the year, and experience is thus gained in presenting, in the form of lectures, the results of reading and research. A reading knowledge of French and German is required. *Twice a week.* Hours to be arranged.

Physical Training and Athletics

Professor HETHERINGTON; Miss BENDER.

The primary aim of the work in physical training is to foster hygienic habits among the students and supervise their exercises (1) by giving an opportunity to participate in those gymnastic and athletic activities that lead to a higher functional development, (2) by stimulating an interest in their physical efficiency and in the pleasures of gymnastic and athletic activities, and (3) by giving a general working knowledge of their own physical needs and of the principles of physical training for their own guidance.

The essential and central phase of the large variety of gymnastic and athletic exercises offered is the carefully graded and progressive system of educational gymnastics. All the work is practically individual, as each student's work is prescribed by the Director according to needs, fitness and taste. By a system of grading and the use of squads, sections and divisions, advanced work is given, but students are not allowed to enter advanced heavy gymnastic or special events in gymnastics or athletics until they have attained the required grade tests. All candidates for athletic teams, class as well as University, not taking regular work are required to register with the Director and pass the grade tests. All students, whether taking work in athletics or not, are entitled to a physical examination and advice as to their physical training. There is no gymnasium fee, but a regulation suit adapted for outdoor as well as indoor work is required.

For their value in student life and to those students physically fit to participate in them, all forms of competitive athletics and intercolle-

giate contests are encouraged. Intercollegiate contests are considered a part of student body life and a student enterprise, but in order that such contests may be in accordance with good training principles and the broader educational aims of the institution, they are placed under department supervision and control.

1. Practical Training. All the general gymnastic and athletic training is organized under the head of this Course. The work comprises corrective, light and heavy gymnastics, gymnastic games, instructions in boxing, wrestling, fencing, outdoor games, recreative exercises and athletic training. *Three hours a week.* One hour's credit. Professor HETHERINGTON, Miss BENDER, Miss ENYART, Ml. TUTTLE, Mr. BURK, Coach HAWKINS, Coach SNIDER, and Coach O'DEA.

Technique of Athletics. A Course of lectures on the theory, technique, and points of skill in different athletic sports. All candidates for teams are expected to attend the lectures on the technique of their events. Hours to be arranged. No Academic credit.

2a. Principles of Physical Training. A short Course of general lectures to be taken with Course 1 during the first year's work. W., 9:30. Professor HETHERINGTON and Miss BENDER.

3. Advanced Course in Gymnastics. Advanced heavy gymnastics with instruction in the technique of gymnastics, floor work and the practical leadership of squads, divisions and classes. *Six hours a week.* Two hour's credit. Hours to be arranged. Professor HETHERINGTON and Miss BENDER.

III. DEPARTMENT OF EDUCATION

FACULTY.

RICHARD HENRY JESSE, LL. D.,
President.

JOSEPH MARTIN WHITE, A. M.,
Professor of Pedagogy.

MAX MEYER, Ph. D.,
Professor of Experimental Psychology.

FRANK THILLY, A. B., Ph. D.,
Professor of Philosophy.

JOHN SITES ANKENY, Jr.,
Instructor in Freehand Drawing.

J. M. GREENWOOD, LL. D., Superintendent of Public Schools, Kansas City,
Non-resident Lecturer on Pedagogy.

F. LOUIS SOLDAN, Ph. D., Superintendent of Schools, St. Louis,
Non-resident Lecturer on Pedagogy.

Most of the members of the Academic Faculty, pp. 62-6, and the instructors in the Industrial work required for a Life Certificate are members of this Faculty.

Admission:

The requirements for admission to this Department are the same as to the Academic Department. See page 30.

Life Certificate:

The Courses in this Department are intended to prepare students to teach in the secondary schools of the State. They lead to the Life Certificate, which entitles the holder to teach for life in any public school in Missouri.

To obtain this Certificate the student must fulfill the following conditions:

1. He shall meet the requirements for the Academic degree.

2. He shall elect and complete in a satisfactory manner not less than twelve (12) hours of Pedagogy, and not less than six (6) of Psychology.

3. In addition to what is required for an Academic degree, he shall complete in a satisfactory manner at least six hours in Agriculture, or Horticulture, or Household Economics, or Shopwork, or Drawing. This work may be done in the regular session or in the summer session, provided that the work offered in the summer session be sufficient in quantity.

Students that apply for the Life Certificate may take in any semester fifteen (15) hours of Academic work and three (3) hours of industrial work, but in no case shall the number of hours exceed eighteen.

None of the Industrial work mentioned above may be counted toward an Academic degree, but six hours of it are required for the Life Certificate and all of it may be counted towards the degree of B. S. in Agriculture.

Courses in Industrial Education:

For the work offered in Agriculture and Horticulture, for the Courses for teachers in Shop-work, Sloyd, and Mechanical Drawing, and for the studies obtainable in Household Economics, see the portion of the Catalogue that describes the College of Agriculture and Mechanic Arts. For Freehand Drawing, see page 97.

Experimental Psychology and Child Study:

For Courses, see page 85.

Courses for Teachers in the Summer Session:

In the summer of 1902, the University will offer Courses in Agriculture, Biology, Chemistry, English, French, German, Greek, History, Horticulture, Latin, Mathematics, Physics, and Sloyd. They are especially for the advantage of public school teachers of the State, though open in some subjects to regular students in the University. The first term of the summer work begins June 2. Circulars giving full details may be had upon application by letter to the University.

Theory and Practice of Teaching

Professor WHITE.

The following Courses are offered:

1a. History of Education. Lectures. Essays, reports and discussions. *M. W. F., at 10:30.*

1b. Educational Classics. Readings, reports and discussions. *M. W. F., at 10:30.*

2. Science of Education. Lectures, recitations and occasional essays. *T. Th. S., at 3.*

3a. School Supervision. Lectures and recitations. *M. W. F., at an hour to be selected.*

3b. Pedagogical Seminary. Discussion of current educational questions. *Twice a week, at an hour to be selected.*

All Courses may be counted toward an Academic degree.

Free-Hand Drawing

[For the present, Courses in Free-hand Drawing are entered under the Department of Education.]

Mr. ANKENY.

As its name implies, this department deals with the technical and not with the historical side of art. It aims to give the students a comprehensive knowledge of form and color, with the ability to render them truthfully in various mediums; to develop an appreciation of the technical qualities expressed in the work of good artists; to present the principles of design underlying painting, sculpture, architecture, and the crafts.

The following Courses are offered:

1. Normal. A Course intended primarily for students preparing to teach in the public schools. The subjects presented under Courses 3 and 9 are taken up in their elementary forms, with as much practice as the time will allow. The principles are then applied to children's work under ordinary school room conditions. Numerous examples of the work actually done by children are shown. This Course counts as six hours of Industrial work towards the Life Certificate. *M. W. F., at 4.*

3. Representation. A Course intended to familiarize students with perspective, light and shade and reflection, color; to give them practice in triangulation, drawing by line and by planes; in sketching with pencil and pen and ink; in painting with water colors; in drawing with charcoal. The best examples obtainable of original work and of reproductions are shown, and their technical qualities considered. Lectures and recitations, and practice, with outside work. *M. W. F., at 3.*

5. Casts and Still Life. This Course embraces working from still life, to the end of attaining greater accuracy of vision and of rendering than is possible from the changing, living model. Plaster copies of the best pieces of sculpture are chosen on account of their refined forms, while good examples of Japanese pottery, etc., have been selected on account of their subtle color qualities. In the color work, much attention

is paid to arrangement and combinations of the objects composing the group. Laboratory periods, *M. W. F.*, at 9:30.

Must be preceded by 3 or its equivalent.

7. Head and Composition. A Course in working from living forms with application to compositions illustrating given subjects. In the the spring and fall, the work is from out of door subjects. At other times, from the draped model. The same pose is maintained long enough to enable careful study. Natural and ideal types are compared. The general principles of artistic anatomy are presented in lectures. Lectures and laboratory periods, *T. Th. S.*, at 2.

Must be preceded by 1, 3, and 5, or their equivalent. Course 9 is recommended as additional preparation for this Course.

9. Design. Original exercises involving the principles of design, namely, balance, rhythm, and harmony. Work in space relations, in harmony of colors, in conventionalization of natural forms for the purpose of design. An attempt is made to carry out the above principles in the making of designs for definite purposes in the applied arts. Critical study of examples, with reports. Lectures and experimental practice, with a great deal of outside work. *T. Th. S.*, at 9:30.

IV. DEPARTMENT OF LAW

FACULTY.

RICHARD HENRY JESSE, LL. D.,
President.

ALEXANDER MARTIN, LL. D.,
Professor of Law and Dean of the Faculty.

JAMES AULL YANTIS, LL. B.,
Professor of Law.

JOHN DAVISON LAWSON, LL. D.,
Professor of Law.

ANDREW WALKER McALESTER, M. D., LL. D.,
Lecturer on Medical Jurisprudence.

HON. ELMER B. ADAMS, LL. D., Judge of the U. S. District Court for
the Eastern District of Missouri,
Non-resident Lecturer on the Law of Wills and Administration.

HON. JAMES B. GANTT, LL. D., Justice of the Supreme Court of Mis-
souri,
Non-resident Lecturer on Corporations.

PAUL BAKEWELL, LL. B., St. Louis, Mo.,
Non-resident Lecturer on Patents and Trade Marks.

HON. W. M. WILLIAMS, Ex-Justice of the Supreme Court of Mis-
souri,
Non-resident Lecturer on Negotiable Instruments.

Admission:

The Department of Law is open alike to men and women.

The candidate must be eighteen years of age and, if unknown to the Faculty, must bring satisfactory testimonials of good character.

It is the purpose of the University to raise gradually the standard of Academic requirements for admission to the Department of Law. At present the minimum of requirements is twelve units of high school work, three of which must be in English. Students may enter either by certificate or diploma or by examination. See Requirements for Admis-

sion, page 30. Moreover, certificates or diplomas indicating the requisite qualification for admission to the Department will be honored: *First*, from all the universities and colleges which the Committee on Entrance by Certificate shall find to be of unquestionably high standing. *Second*, from all normal schools, high schools and academies whose courses and quality of instruction shall be found by said Committee to correspond with the standard of requirements for admission to the Academic or to the Law Department.

County certificates for teaching are not accepted in lieu of examination.

No examination in Law is required.

The session begins on the second Tuesday in September, and closes on the first Wednesday in June of each year.

Advanced Standing:

First Class. Students may be admitted at any time during the session by fulfilling the requirements for entrance and by passing an examination as ordered upon the work in Law accomplished by the class at the date of the examination. Upon failure in one or two subjects, conditions may be imposed in like manner as on admission to the Second Class hereinafter mentioned.

Second Class.—No one will be admitted to the Second Class as a candidate for a degree unless he applies at the beginning of the year, is possessed of the academic education and moral character required for admission to the First Class, and has passed a satisfactory examination upon the studies of the first year. In exceptional cases an applicant may be admitted and conditioned on one subject of 2 or 3 hours' work in each semester of said first year. But such conditions must be made up during the year or before admission to the Third Class. If the applicant achieves inferior grades generally on the subjects upon which he has passed examination, his case will not be an exceptional one for entrance upon condition.

A certificate of admission to the bar is not accepted as a qualification for entrance to advanced standing.

No one is permitted to pursue in one year the full course of two. No member of the First Class is admissible to instruction in the Second or Third Class.

Certificates from law schools, approved by the Law Faculty, showing that the applicant has accomplished with passing grades the first year's work in said schools, will be accepted in lieu of examination in law for the Second Class.

Examinations for admission to the Second Class will be held on the second Tuesday in September, at 10:30 o'clock a. m.

Third Class.—No one, except as hereinafter provided, will be admitted to the Third Class unless he applies at the beginning of the year and has been a resident student for one year in the Second Class, and has accomplished all the studies of the First and Second Classes. If he has failed in any study of the previous years, or has not made up conditions imposed upon him by reason of such failure or deficiency, he is not admissible to the Third Class.

Applicants from other Law Schools approved by the Law Faculty, which require a course of three years' work for graduation, are entitled to examination for admission to the Third Class, provided they have accomplished with passing grades the work of the first and second years of said schools, and have been resident students therein during the whole of the second year, and apply here at the beginning of the third year.

If found on examination to be competently qualified on the first and second years' work required in this department they will be admitted to the Third Class.

Admission to the Third Class, subject to conditions, is not permitted.

Graduate Class.—No one is admitted to this class as a candidate for the degree of LL. M. unless he holds the degree of LL. B. from the Law Department of this University, or is a graduate of some other law school, whose course of instruction and study, upon which his degree is predicated, is equivalent to the course of instruction and study, required for the corresponding degree in the Law Department of this University. No admission to this Class will be permitted after two weeks from the commencement of the school year.

Special Class.—For admission to instruction as special students, the same moral and academic qualifications are required which are prescribed for admission to the other Classes, but if the applicant is twenty-one years of age, the qualification of high school attainments will not be required for his admission as a special student. Such special students will not be considered as candidates for graduation. No qualifications in Law are required.

COURSES OF STUDY.

The principal object of the courses of study is to qualify graduates for an efficient and successful discharge of their duties as licensed attorneys. It has never been within the aim of the School to qualify students for the mere purpose of passing the special examinations which may possibly take place at the bars to which they may seek admission. The courses of study have been adopted with the view of familiarizing the

successful candidate for a degree with the principles of substantive law, and the law of remedial procedure, as prevailing in American jurisprudence. After a short study of the statutes and decisions of the state in which he expects to settle, he will deserve admission to the bar. As the degree of LL. B. from this Department entitles the graduate to admission to the bar of Missouri, the Faculty can not overlook the fact that a fair knowledge of the general statutes of the State, and of the modifications which the common law has undergone in the decisions of the courts, is an essential qualification for admission to its bar. But, as there is great similarity in the general statute and judiciary law of the Western, Northwestern and Southwestern States, it is believed that what may be learned in that respect will be of benefit to a student settling in any of these States.

UNDERGRADUATE COURSE.

The Undergraduate Course covers a term of three years. There are three Classes—First, Second and Third. Instruction is given daily to these Classes in the form of lectures, recitations, and examinations upon the text-books recommended, and upon leading cases furnished by the instructor or contained in books of cases. Every Tuesday the students participate in the exercises of a Moot-court.

Instruction on every subject in the Course is followed by an examination at the end of each semester, the hours of instruction devoted to each subject being arranged to accord with its relative importance in the Course.

The following program contains the instruction of the Undergraduate Course :

PROGRAM OF INSTRUCTION.

FIRST YEAR (FIRST CLASS.)

First Semester.

Contracts. Professor LAWSON. *Five hours a week.* Lawson on Contracts.

Torts. Professor YANTIS. *Three hours a week.* Hale on Torts.

Criminal Law. Professor YANTIS. *Two hours a week.* Missouri Statutes and Selected Cases.

Second Semester.

Bailments. Professor LAWSON. *Two hours a week.* Lawson on Bailments.

Personal Property. Professor LAWSON. *Two hours a week.* Lawson's Cases on Personal Property.

Common Law Procedure. Professor MARTIN. *Three hours a week.*
Martin on Civil Procedure at Common Law.

Partnership. Professor MARTIN. *One hour a week.* Shumaker on Partnership.

Criminal Procedure. Professor YANTIS. *Two hours a week.* Missouri Criminal Code and Selected Cases.

SECOND YEAR (SECOND CLASS).

First Semester.

Sales. Professor LAWSON. *Two hours a week.* Lawson's Cases on Personal Property.

Real Property. Professor YANTIS. *Three hours a week.* Tiedeman on Real Property.

Equity Jurisprudence. Professor MARTIN. *Three hours a week.* Bisham's Principles of Equity. Martin's Selected Cases.

Private Corporations. Professor MARTIN. *Two hours a week.* Elliott on Corporations.

Second Semester.

Insurance. Professor LAWSON. *Two hours a week.* Elliott on Insurance.

Real Property. Professor YANTIS. *Three hours a week.* Tiedeman on Real Property.

Equity Procedure. Professor MARTIN. *Three hours a week.* Heard's Equity Pleading and Precedents.

Damages. Professor MARTIN. *One hour a week.* Sedgwick's Elements of Damages.

Homesteads. Professor YANTIS. *One hour a week.* Selected Cases.

THIRD YEAR *(THIRD CLASS).

First Semester.

Procedure Under the Code. Professor MARTIN.

Constitutional Law. Professor MARTIN.

Evidence. Professor YANTIS.

Bills and Notes. Professor LAWSON.

Second Semester.

Suretyship. Professor LAWSON.

Maritime Law. Professor MARTIN.

*As the classes in the department have not yet reached the third year in the three years' course, the schedule of instruction for that year is not particularized.

This program is subject to changes necessary and proper for conveniently accomplishing the Course.

Wills and Probate. Professor YANTIS.

Municipal Corporations. Professor MARTIN.

Extraordinary and Special Remedies. Professor MARTIN.

Bankruptcy. Professor MARTIN.

Quasi Contracts. Professor LAWSON.

International Law, Public and Private. Professor LAWSON.

GRADUATE COURSE.

The object of the Graduate Course is to provide the practitioner with a more extended and practical knowledge of important subjects embraced in modern law, than the limited time of the Undergraduate Course permits. It is also intended to afford him assistance in prosecuting the study of any particular subject or branch of law which he expects to follow in his future practice.

The course of instruction embraces advanced work by lectures and recitations on the following subjects:

Constitutional Law, Contracts, Corporations, Insurance, Evidence, Trusts, Patents, Copyrights, Law of Homicide, Theory of Jurisprudence, Practice, Parliamentary Law.

The student in this course is allowed to select any special subject in law for extended examination, to be elected concurrently with subjects embraced in the course. His investigations are directed by the Faculty, who advise him of the books and cases to consult, and afford him assistance and counsel.

It is believed that many licensed attorneys will find it to their advantage to take as special students the instruction in this course.

SPECIAL COURSE.

Students who do not wish to take any of the full Courses, and who are not candidates for any degree, will be permitted to take an elective Course, and pursue any branches of instruction given in any of the Courses of the Department, the exercises of which do not conflict with one another or exceed the hours of work permitted to students in the Department and which can be pursued by them with profit. They will be classed as special students, and will receive from the Faculty certificates of the time spent in the study of the law and of the work therein accomplished.

METHODS OF INSTRUCTION.

In the Department of Law, instruction is given by means of lectures, recitations, examinations, class quizzes, seminars, moot-courts, and

the required study of treatises and cases. The instructor will conduct his instruction in any or in as many of these methods as he may think most beneficial to the class.

MOOT-COURT.

Every Tuesday a Moot-court is held, in which all Law students participate. In this court the matters discussed arise in some supposed cause. Regular pleadings are required, and when the cause is supposed to be in the Supreme Court, in addition to the pleading, papers are prepared necessary in actual practice, as the writ of error, assignment of errors, bill of exceptions embodying the instructions to the jury, ruling upon the admission or exclusion of evidence, motions for new trials, in arrest, etc. Briefs of points and authorities must also be submitted and filed. A member of the Faculty presides at the trial, determining all preliminary and incidental motions. A member of the Third Class or Graduate Class is called to sit as special judge in each cause, who, at the next court held by the same Professor, gives his opinion in writing, subject to appeal to the member of the Faculty so presiding at the trial. Practical instruction in pleading is given by requiring half of the members of a class to draft pleadings in causes assigned to them, and to submit them to the other half. The pleadings thus drafted are discussed and settled in the class room, in the presence of the Professor giving instructions on that subject and under his rulings.

DEGREES AND HONORS.

Degrees:

Members of the Third Class who have successfully passed the examinations of the Third year will be entitled to receive the degree of Bachelor of Laws. Members of the Graduate Class who have successfully passed the prescribed examinations will be entitled to receive the degree of Master of Laws.

All who receive from this University the degree of Bachelor of Laws are by law admitted, without further examination, to practice in all courts of Missouri.

Honors:

Whenever a candidate for graduation attains a high degree of excellence in his class-work the degree of Bachelor of Laws or Master of Laws, as the case may be, will be conferred upon him with distinction; and the words *cum laude* or *magna cum laude* will be incorporated in his diploma. In determining the required degree of excellence the student's

conduct as a gentleman, as well as his attainments as a scholar, will be taken into consideration.

The members of the Third Class are all invited to write essays upon some subject in law, assigned to them by the Faculty before January 1 of each year. The essays so written are submitted to a committee of judges charged with the duty of designating the best two of said essays. The names of the authors of the best two essays are placed on the commencement program. Students not writing essays as aforesaid, and not excused therefrom by the Law Faculty, shall not be eligible to any of the honors and distinctions heretofore mentioned as in addition to the right of graduation.

Prizes:

A prize of \$50, provided in the endowment fund of the Hon. James S. Rollins is awarded each year, at Commencement, to the member of the Second Class, who, by superior scholarship and moral conduct, has shown himself entitled thereto.

The Edward Thompson Company, Law Publishers, of Northport, New York, give annually to the author of the best thesis submitted by a member of the graduating class, a prize consisting of a complete set of their famous American and English Encyclopedia of Law. This set consists of thirty-one volumes, and is valued at \$300.

ADVANTAGES.

The advantages now offered by the University of Missouri for instruction in the science and practice of common law and equity, as prevailing in the United States, have been greatly increased within the last few years.

Accommodations:

Since the destruction of the main building of the University by fire, January 9, 1892, the Curators have erected a large, commodious structure for the use of the Law Department. It contains a spacious library room, two large lecture rooms, moot-court and clubrooms, quizz rooms, and offices for the Professors.

Libraries:

The Library of the Law Department consists at present of a collection of 10,000 volumes of reports, and treatises on every subject of the law. It is increased annually by the Curators from funds appropriated by the legislature and from library fees payable at entrance. All the decisions of the American courts are received as soon as published. A complete set of digests of decisions and reports is kept up, so that the

latest expressions of authority are brought within reach of the students and Professors. Members of the Law Department have access to the General Library of the University, and to the collections of the State Historical Society. Our students have access to about 75,000 volumes. In the current biennial period \$7,500 will be spent in enlarging the Law Library.

Academic Facilities:

The connection of the Law Department with the University enables the Law student, without additional charge, to take instruction in other Departments of the University, provided it does not interfere with his legal studies. Some members of every class have found it convenient to pursue such studies as Latin, French, Logic, English, Military Science, Political Economy, Sociology, History, Stenography, Elocution, Etc.

University Societies:

Members of the Law Department are eligible to membership in the two literary societies of long standing in the University, known as the "Athenæan" and the "Union Literary." They are also eligible to membership in the "Bliss Lyceum," to which members of the Law Department alone are admitted, and to a number of Debating Clubs. These societies are nurseries of oratory, debate, and parliamentary law.

For further information and special circulars, address

ALEXANDER MARTIN, Dean,

Columbia, Mo.

V. DEPARTMENT OF MEDICINE

FACULTY.

RICHARD HENRY JESSE, LL. D.,
President.

ANDREW WALKER McALESTER, A. M., M. D., LL. D.,
Dean of the Faculty, and Professor of Surgery.

WOODSON MOSS, M. D., LL. D.,
Professor of the Practice of Medicine and Therapeutics.

MILLARD LEWIS LIPSCOMB, A. M.,
Professor of Physics.

JOHN WALDO CONNAWAY, D. V. S., M. D.,
Professor of Comparative Medicine.

*SIDNEY CALVERT, B. Sc., A. M.,
Assistant Professor of Chemistry.

WILLIAM GEORGE BROWN, B. S., Ph. D.,
Professor of Chemistry.

GEORGE LEFEVRE, B. A., Ph. D.,
Professor of Zoology.

CLARENCE MARTIN JACKSON, M. S., M. D.,
Assistant Professor (in charge) of Anatomy and Histology.

CHARLES WILSON GREENE, A. M., Ph. D.,
Professor of Physiology and Pharmacology.

†WALTER McNAB MILLER, B. S., M. D.,
Professor of Bacteriology and Pathology.

†GUY L. NOYES, M. D.,
Professor of Eye and Ear Diseases.

‡

Professor of Gynecology and Obstetrics.

RICHARD B. MOORE, B. S.,
Instructor in Chemistry.

*Absent during session of 1901-2.

†Appointment to take effect in September, 1902.

‡To be appointed before the opening of next session.

WINTERTON CONWAY CURTIS, A. B., A. M., Ph. D.,
Instructor in Zoology.

CLARK WILSON HETHERINGTON, A. B.,
(Professor of Physical Training), *Lecturer on Medical Gymnastics.*

ARTHUR ERMON HACKETT,
Lecturer on Climatology.

ASSISTANTS AND FELLOWS

PETER POTTER, B. S.,
Assistant in Anatomy.

CARL MILLER SNEED, M. D.,
Assistant in Pathology and Bacteriology.

ELEXIOUS THOMPSON BELL, B. S.,
Fellow in Anatomy.

CHARLES CLAUDE GUTHRIE, M. D.,
Fellow in Physiology.

HENRY CLAY FREUDENBERGER, B. S.,
Fellow in Pathology and Bacteriology.

LESTER BENNETT GARY, Ph. B.,
Fellow in Zoology.

ROBERT LEE REID, M. D.,
Fellow in Chemistry.

JOSEPH SUMMERS, A. M.,
Fellow in Physics.

THORNTON EASLEY MOORE,
Student Assistant in Physiology.

NON-RESIDENT LECTURERS.

FRANK L. HENDERSON, M. D.,
Lecturer on Ophthalmology.

G. R. HIGHSMITH, B. S., M. D.,
Lecturer on Railroad Surgery.

A. B. MILLER, A. B., M. D.,
Lecturer on Gynecology.

J. E. TEFFT, M. D.,
Lecturer on Genito-Urinary Surgery.

W. A. TICHENOR, M. D.,
Lecturer on Gynecology.

The Medical Department of the University was organized at Columbia in 1872, and instruction was begun in February, 1873. The Department is open alike to men and to women.

REQUIREMENTS FOR ADMISSION.

Evidence of good moral character is required in every case.

Entrance from Approved Schools:

The applicant must present to the Committee on Entrance by Certificate a certificate or diploma from a literary or scientific college, normal school, or high school, or one of equal grade, approved by the University (see pp. 38-9).

It is important that such applicants not from approved schools as are able to do so should present to the President of the University certificates from the president of a college or normal school, or the principal of a high school or academy, showing the work finished with passing grades.

Entrance by Examination:

Students whose diplomas or certificates are not accepted by the Committee on Entrance by Certificate must submit to an examination.

Twelve units are required for admission, of which at least two must be in English, and one in Algebra. For particulars see pp. 30-7.

Admission to Advanced Standing:

Every applicant for advanced standing will be required to present credentials from an accredited college, showing satisfactory completion of courses equivalent to those already attended by the class to which he seeks admission. Moreover, the usual entrance requirements must be satisfied, and evidence of good moral character must be offered.

Applications for advanced standing should be addressed to the Dean of the Medical Department.

Special Students:

Students may be admitted to the Medical Department without passing the regular examination required for entrance, under the following conditions: (1) They must be at least 21 years of age; (2) they must show good reason for not taking a regular course; (3) they must pass such examination or other tests as shall demonstrate fitness to pursue profitably the subjects selected by them; (4) they will not be allowed to take work in more than two subjects with such kindred work as the Head Professor may suggest; (5) they must furnish evidence of good moral character. Such students are expected to do specially good work in the subjects which they choose. If at any period of the session their work

becomes unsatisfactory in one or both of the two major subjects, their connection with the University shall be severed by the Dean of the Department.

PLAN OF INSTRUCTION.

The curriculum is carefully graded so that the various branches are taken up in their natural order. In the opinion of the Faculty, the student obtains the best results by confining his first two years to purely scientific subjects. The fundamental sciences must be mastered before he can understand the technical and clinical Medicine taught in the third and fourth years. In the clinical instruction the underlying principle is the same as that applied in the scientific laboratories. *By the laboratory method the student actually does the work himself; and if the work is not satisfactorily done, he must repeat it until he is proficient.* The student by this plan of instruction acquires familiarity with the instruments and methods of scientific study and skill in the scientific diagnosis of disease which are invaluable in the actual practice of Medicine.

Instruction is given by lectures, recitations, clinical teaching, demonstrations, laboratory work, and conferences in which teacher and students informally discuss topics, or themes, written by members of the class.

COMBINED MEDICAL AND ACADEMIC COURSES.

It is the policy of the Medical Department to encourage in every way possible the gaining of a liberal education as a sound preparation for the professional study of Medicine.

Students who expect to study Medicine are strongly urged to take first a scientific course in the Academic Department. By a proper choice of electives, the Academic student may obtain work equivalent, with the exception of Bacteriology and Pathology, to the first two years of the Medical course. He may then enter the Junior Medical class, and thus secure both an Academic and a Medical degree in six years.

In order to accomplish this, the student, while in the Academic Department, should elect the following Courses: Anatomy 1a, 2b, 3, 4, 5; Chemistry 2, 4, 5, 6; Physics 3; Physiology 2, 3a, 4b; Zoology 1, 2, 4b; Hygiene 4a. The Bacteriology and Pathology of the Second Year of Medicine must be provided for in addition to the Academic work.

The following sequence of studies is recommended:

First Year.—Chemistry 2, Physics 3, Zoology 1, Anatomy 1a.

Second Year.—Chemistry 4, Zoology 2, Anatomy 2b, 4.

Third Year.—Chemistry 5, Zoology 4b, Anatomy 3, 5.

Fourth Year.—Chemistry 6, Physiology 3, 4a, 5b, Hygiene 4a.

Additional electives sufficient to make a total of 15 hours a week

each semester. A reading knowledge of German and French is very desirable.

With the consent of their Dean, Medical students may take work offered in the Academic Department and in the School of Agriculture; but the total number of hours shall not exceed 18 a week.

NEW MEDICAL BUILDING.

Forty thousand dollars has been appropriated for a new Medical Building. This provides for a handsome and commodious building which is now being erected. The plans provide for about twenty-two thousand square feet of floor space besides a large basement. In this building will be brought together the lecture rooms, laboratories, and offices for Anatomy, Histology, Physiology, Pathology, Bacteriology, Hygiene, Pharmacology and Toxicology. The basement will be devoted to aquaria rooms, animal rooms, shop, and rooms for special lines of research. Here, also, will be located a modern well-equipped cold storage plant with accessory preparation rooms for Anatomy. The cold storage plant, for which a special appropriation of \$5,000 was made, will also provide for a cold storage room in the Hospital.

PARKER MEMORIAL HOSPITAL.

STAFF.

Andrew Walker McAlester, M. D....	Superintendent and Visiting Surgeon
Woodson Moss, M. D.....	Visiting Physician
Richard Foster Rand, M. D.....	Resident Surgeon
*—————	Gynæcologist and Obstetrician
Guy L. Noyes, M. D.....	Ophthalmologist and Otologist
Jean O. Kay.....	Superintendent of Nurses

By the gift of Wm. L. Parker, the Medical Department is supplied with an excellent Hospital, which is now completed and in operation. In the words of the donor, it is "for the benefit of the Medical Department." This building is a handsome modern structure, conveniently located on high ground at the west edge of the Campus. The building is heated by steam, lighted by gas and electricity, and well ventilated.

The Hospital is a State Hospital, owned and controlled by the University, and is open to the sick of Missouri under the following conditions:

The Hospital is designed for the treatment of accidents, of acute and subacute diseases, and of chronic curable diseases. Cases of incurable or contagious diseases or of acute alcoholism will not be admitted.

*To be appointed before the opening of the next session.

One purpose of the Hospital is to furnish clinical instruction to the students of the Medical Department, in order that by the observation and study of disease they may be fitted to practice medicine intelligently. Accordingly, all patients in the public wards are under the observation of groups of the Senior students, led by a Professor from the Medical Department. The patients serve to illustrate the nature of disease, its course, and its treatment. In the use of patients in this way nothing is done to offend their sensibilities, and their interest and welfare are constantly and sacredly conserved by those in charge of the Hospital.

Patients suffering from severe accidents or serious illness may be brought to the Hospital at any hour of the day or night. Other patients are admitted between the hours of 10 a. m. and 5 p. m. They must apply in person at the Hospital, to be examined for admission, or if unable to apply in person, they may be visited by the examining physician at their homes on application to the Hospital.

Patients living outside of Columbia must make application in writing through some reputable physician and send a statement of the nature of their disease. All patients must pay the charges as provided for in the rules. A limited number of private cases can be accommodated.

Cases sent in by outside physicians come under the control of the Hospital Staff, the medical cases coming under the care of the regular visiting physician and the surgical cases under the care of the regular visiting surgeon. The family physician will be admitted to the Hospital to consult with the visiting staff.

Rates.—Public ward, \$7 a week; single room, \$10 to \$15 a week.

These charges include board and ordinary nursing and medicines. Operative cases are subject to extra charge for surgical dressings, etc.

Operative cases receive special nursing for 24 hours after the operation, or longer if deemed necessary. Further special nursing if desired by the patient will be charged for at the rate of \$2 a day. No fees for operations or for medical and surgical attendance are charged clinical patients, whether in wards or in single rooms.

Patients requiring operations must deposit beforehand sufficient money to cover their expenses for the time they will probably have to remain in the Hospital. The unused balance of the deposit will be refunded when the patient is discharged.

Patients requiring medical attendance must deposit in advance money for one week's board at least and more if it be required. Board is payable in all cases weekly in advance.

Private Cases.—A limited number of private cases are received. The charges are \$15 a week and upwards for ordinary medicines, nursing, and

board. Private cases are required to pay a fee to the medical or surgical attendant.

BUSCH CLINICAL AMPHITHEATRE.

By the gift of Adolphus Busch a handsome Clinical Amphitheatre is provided adjoining the Hospital. The seating capacity is about 100. In the basement of the Amphitheatre a number of commodious rooms are provided for the work in Dispensary Clinics.

In the various clinics, so far as is compatible with the safety of human life, the student himself does the work. He makes his own examinations and observations, studies carefully the progress of the disease, and finally submits a detailed written report of the case to the remainder of the class for discussion. Much stress is laid upon bedside clinics.

The Boone County Infirmary with capacity of 100 is located near Columbia. It furnishes a considerable variety of medical and surgical clinics. Members of the Faculty belong to the consulting staff.

LABORATORIES.

The scientific laboratories (Anatomy, Histology, Pathology, Bacteriology, Physiology, Embryology, Chemistry, and Physics) are in charge of men who give their whole time to teaching, writing and research.

Anatomy and Histology.—The Anatomical laboratories are well equipped with tables, lockers, apparatus for injection, etc. Owing to improved methods of preservation, human dissecting material is available throughout the entire year.

The department possesses a museum collection, which is efficient for purposes of practical instruction. It consists of several complete series of body sections, a variety of preserved dissections in human anatomy, a collection of foetal and adult skeletons, mounted and unmounted, specimens illustrating comparative anatomy, and a collection of anatomical models, prominent among which are a life-size Auzoux plastic man, female pelvis, etc.

The Histological laboratory is equipped with new Leitz microscopes, microtomes, paraffin baths, and apparatus, reagents, and material necessary for a thorough study of practical microscopic anatomy. In order to give ample individual instruction in this work, the students are divided into sections of about twenty each.

Embryology.—The laboratory of Embryology is well equipped with microscopes, microtomes, incubators, and other apparatus required for the work. An excellent collection of models, charts, and preserved specimens, and also a stereopticon with several hundred views, are available for instruction.

Pathology and Bacteriology.—The Pathological laboratory is equipped with cabinets, microscopes, etc. This laboratory is separated in space from that of Bacteriology.

The Bacteriological laboratory is well equipped with microscopes, incubators, a microtome, different sterilization apparatus for low and high pressures, centrifuge, and many other pieces of apparatus necessary for the practical study and investigation of bacteriology and hygiene. The laboratory also possesses a good collection of living bacteriological cultures, which enable the Medical student to see and study those microbes that are of the greatest practical importance.

Physiology and Pharmacology.—The laboratories for Physiology and Pharmacology are supplied with glassware, chemicals and microscopes and with duplicate sets of physiological apparatus for general student use. There is also a good selection of special pieces of apparatus for demonstration and for research.

Chemistry.—There are at present in use 4 laboratories, 2 balance rooms, 2 lecture rooms, 2 private laboratories, and 1 preparation room. There are lockers for 250 students and desk-room for 125 working at one time. Accommodation is reserved for 90 Medical students working in medical, inorganic, and organic Chemistry, and qualitative and urinary analysis, and ample facilities are provided for special work.

Physics.—The laboratories are large and well equipped with apparatus for laboratory work, and for illustrating the lectures in Physics.

LIBRARY.

A special room for the Medical Library is provided in the new building. The principal scientific and medical journals are received regularly and placed on file. Moreover each Chair has its own special library of technical works, all of which are accessible to Medical students. All the libraries of the University have together about 48,000 bound volumes, not including duplicates.

DEGREES.

Upon a satisfactory completion of the course, the degree of Doctor of Medicine is conferred.

SCHOLARSHIP.

The Rollins Scholarship in the Department of Medicine is a prize of fifty dollars which is awarded to that member of the Junior (Third Year) class who has made the best record during the course.

FELLOWSHIPS.

Fellowships are annually established in any subject where such addi-

tional teaching force may be required. They are appointed by the Board of Curators, are required to teach five or six hours a week, and receive for this service \$200 with exemption from the payment of fees.

These Fellowships are open to Medical students who hold a Bachelor's degree. In extraordinary cases undergraduates may be appointed, but in such cases they are known as Student Assistants and receive only \$150.

During the year 1901-2 Fellowships have been held in Anatomy, Chemistry, Pathology, Physiology, and Zoology. A Student Assistant was appointed in Physiology.

COURSE OF INSTRUCTION.

	First Semester.	Second Semester.
<i>First Year.</i>		
Anatomy	6	6
Osteology	3	—
Histology	3	3
Chemistry	3	6
Physics	3	3
<i>Second Year.</i>		
Anatomy.....	3	3
Physiology.....	6	4
Pharmacology.....	—	2
Chemistry	3	—
Bacteriology.....	6	—
Pathology.....	—	6
Embryology	—	3
<i>Third Year.</i>		
Therapeutics.....	3	3
Practice of Medicine	3	3
Comparative Medicine.....	3	—
Clinical Pathology.....	3	—
Hygiene	3	—
Principles of Surgery	—	3
Obstetrics.....	—	3
Dispensary Clinics.....	—	3
<i>Fourth Year.</i>		
Clinical Medicine.....	3	3
Clinical Surgery	3	3
Obstetrics.....	3	—
Gynæcology	3	3
Medical Jurisprudence.....	—	1
Diseases of Eye and Ear.....	3	3
Climatology	—	1
Medical Gymnastics.....	—	1

Courses in Detail

[The letter a after the number of a Course indicates that it is given in the first semester only; the letter b that it is given in the second semester only. Simple numbers indicate that the Course runs through the year.]

ANATOMY AND HISTOLOGY.

Assistant Professor JACKSON; Mr. POTTER; Mr. BELL.

1a. Osteology. A complete unmounted skeleton is issued to every two students for their use during this Course. A deposit is required which is refunded when the skeleton is returned uninjured. *T. Th. S., at 8:30.* First Year.

2. Practical Anatomy. Lecture, Section I, *M.*, Section II, *F.*, at 10:30; Laboratory, Section I, *M. W.*, Section II, *T. F.*, 1:30-4. First Year.

3. Descriptive Anatomy. A recitation and demonstration Course in systematic human anatomy. Text, Gray's Anatomy, 15th Edition. *M. W. F.*, at 8:30. First Year.

4. Normal Histology. Each student prepares, stains and mounts permanently at least 50 specimens of normal tissue. Lecture, *W.*, at 10:30; Laboratory, Section I, *T. F.*, Section II, *M. W.*, 1:30-4:00. First Year.

5a. Neurology and Dissection. Including the central nervous system; sense organs, and the completion of human dissection. *M. W. F.*, 1:30-4:00. Second Year.

5b. Topographic Anatomy. A study of the topography of the various organs by means of serial sections through the entire body. Lectures and laboratory. *M. W. F.*, 1:30-4:00.

6. Investigation. Elective.

ZOOLOGY.

Professor LEFEVRE; Dr. CURTIS; Mr. GARY.

4b. Comparative Embryology of Vertebrates. This Course is designed to give a general knowledge of Vertebrate Embryology, and to furnish an introduction to Obstetrics. In the laboratory the development of the chick is carefully studied from preparations of entire embryos and from sections representing successive stages throughout the development. These observations are used as a basis of comparison with the development of higher forms, including man. Such questions as ovulation, menstruation, determination of the age of embryos, relation of the embryo to the uterus, and the mechanism of nutrition of the embryo, receive special attention. Lecture, *T.*, at 8:30; Laboratory, *T.*, 9:30-12:30, *Th.*, 8:30-10:30.

CHEMISTRY.

Professor BROWN; Assistant Professor CALVERT; Mr. MOORE; Dr. REID.

General Chemistry. This Course consists of lectures, recitations, and laboratory work, lasting three semesters, including general descriptive inorganic and organic Chemistry, theoretical and physical Chemistry, toxicological Chemistry, qualitative chemical analysis, physiological Chemistry and urinary analysis, with special reference to the needs of the student in medicine, pharmacy, physiology, pathology, hygiene, and toxicology so far as the time will permit. During the whole course the theoretical conceptions of Chemistry are not neglected, and an attempt is made to present the science of Chemistry as a consistent unity. Recitations are regularly held, covering the text and lectures, and from time to time written work is or may be required.

The laboratory work is carried along with the lectures and recitations. For this work each student is provided with desk room and apparatus of his own. Practical exercises are required in the examination of water, air, general qualitative chemical analysis, the detection of poisons (inorganic and organic), the preparation and testing of inorganic compounds, the preparation of some typical hydrocarbons, alcohols, acids, fats, the estimation of urea and the sugars, the reactions of uric acid, of the principal alkaloids, and other important organic compounds, and incidentally the detection of adulterations. *Three times a week, first semester. T. Th. S., 9:30-12. Five times a week, second semester. T. Th. S., 8:30-12; Th. S., 1:30-4. First Year. Three times a week, first semester. T. Th. S., 1:30-4. Second Year.*

Texts: Witthaus, *The Medical Student's Manual of Chemistry*; or Bartley's *Text-book of Medical and Pharmaceutical Chemistry*; or Attfield's *Chemistry General, Medical and Pharmaceutical*, including the *Chemistry of the United States Pharmacopœia*; Hill's *Lecture Notes on Qualitative Analysis*, and *Special Notes of the instructors*.

PHYSICS.

Professor LIPSCOMB; Mr. SUMMERS.

1. **General Physics.** Emphasis is given to those facts of Mechanics, Sound, Heat, Light and Electricity, which have special application to Medicine and Surgery. Lectures and Recitations, W., at 9:30; Laboratory, M. F., 9:30-12. *First Year.*

PHYSIOLOGY AND PHARMACOLOGY.

Professor GREENE; Dr. GUTHRIE; Mr. MOORE.

The Courses in Anatomy, Histology, Physics, and Chemistry given in the first year of Medicine, or the conditions outlined in the announce-

ment of the Academic Department (see page 87) are prerequisites for admission to these Courses.

2. Experimental Physiology. This Course gives a detailed survey of Animal Physiology. Sets of apparatus are provided in the laboratory and selected experiments illustrating the facts and fundamental principles of the subject are performed by the individual student under the personal supervision of the instructors. Lectures, *M. W.*, at 8:30. Laboratory, *M. W.*, 9:30-12. Second Year.

Text-book: American Text-book of Physiology.

3a. Comparative Physiology. The principles of Physiology as illustrated by the simpler forms of animal life. Lecture, *F.*, at 8:30. Laboratory, *F.*, 9:30-12. Second Year.

4b. Pharmacology. This Course presents the physiological action of chemicals. The laboratory experiments are distributed to groups of students and each group is required to demonstrate to the other members of the Course. Lecture, *F.*, at 8:30. Laboratory, *F.*, at 9:30. Second Year.

Text-book: Cushney's Pharmacology and Therapeutics.

PATHOLOGY, BACTERIOLOGY, AND HYGIENE.

*Professor MILLER; Dr. SNEED; Mr. FREUDENBERGER.

1a. Bacteriology. The lectures introduce the student into general questions in Bacteriology—the history of Bacteriology, the nature and development of bacteria, sterilization and disinfection, immunity and disposition, etc. In the laboratory hours the students are instructed in the preparation of culture-media and in the methods of obtaining pure cultures, and in the different staining methods. They study some saprophytic and the most important parasitic bacteria in pure cultures on the different media and the microscopic preparations. Special attention is given to all practical points, the bacteriological diagnosis of cases of infectious diseases, and the bacteriological examination of water, air, and soil. Lectures, *T. Th. S.*, at 8:30. Laboratory, *T. Th. S.*, 9:30-12. Second Year.

2b. Pathology. Lectures and recitations on general questions in Pathology, and on the most important pathological changes found in the different organs of the body. The laboratory hours are devoted to the macroscopical and microscopical study of these changes. Part of the laboratory hours are devoted to the performance of post-mortems. Lectures, *T. Th. S.*, at 11:30. Laboratory, *T. Th. S.*, at 1:30-4. Second Year.

3a. Clinical Pathology. Lectures and recitations on animal parasites and the pathological changes of the liquids and secreta of the body.

*Appointment to take effect in September, 1902.

In the laboratory hours the student is instructed in the microscopic examination of blood, milk, urine, sputum, pus, secreta of nose, mouth, and trachea, contents of stomach and intestines, scrapings, etc. Part of the laboratory hours are devoted to the performance of post-mortems. Lecture, *T.*, at 10:30. Laboratory, *W. F.*, 1:30-4. Third Year.

4a. Hygiene. Lectures with demonstrations on the following subjects: History of Hygiene; hygienic conditions of air and soil, with special reference to the influence of climate (acclimatization) upon diseases; general hygiene of cities, dwellings, schools, prisons, etc.; commercial hygiene; ways in which important diseases, such as malaria, typhoid, diphtheria, tuberculosis, pneumonia, influenza, whooping cough, small-pox, measles, scarlet fever, dysentery, cholera, bubonic plague, etc., spread, and the means of preventing these epidemics; vaccination against small-pox, hydrophobia, and other diseases; disinfection with special reference to households and schools, quarantines; organization of boards of health in different countries; value of compulsory registration, vital statistics, etc. Lectures, *M. W. F.*, at 8:30. Third Year.

THERAPEUTICS.

Professor MOSS.

1. Therapeutics. Aside from drugs, general therapeutical considerations, such as hydrotherapy, electrotherapy, dietetics, etc., receive due attention. Prescription writing becomes a matter of daily drill, and the elegance or incompatibility is tested by actual preparation by the student. Sections of the class under charge of the instructor visit the Parker Memorial Hospital to familiarize themselves with the technique of the hypodermic syringe, aspirator, cautery, stomach tube, stupe, and with various baths and packs. The student closely follows at the bedside the action of drugs in disease, dietetics, nursing, etc., and reports upon the same. *Three hours a week.* Third Year.

MEDICINE.

Professor MOSS.

1. Practice of Medicine. Lectures and recitations and clinics. *Three hours a week.* Third Year.

Text-books: Anders and Osler.

2. Clinical Medicine. Students in this year are required to make written reports of cases in their charge, and to write articles upon subjects assigned. These reports and articles are discussed by the class and the Professor. Monographs and prize essays upon important subjects, by eminent authors, are reviewed before this class, and the students are

required to make digests. This Chair possesses a carefully selected library, to which the students have access. *Three hours a week.* Fourth Year.

3b. Venereal Diseases in relation to Public Health. This Course comprises twenty lectures and is of a semi-popular character. The lectures are fully illustrated by the lantern and slides. The lectures are given from 7:30 to 8:30 one evening each week, second semester. All male students of the University are admitted to these lectures.

COMPARATIVE MEDICINE.

Dr. CONNAWAY.

1a. Comparative Medicine. Lectures, laboratories and clinics. This Course is offered to afford the students of human Medicine an opportunity to broaden their knowledge of clinical symptoms and pathological processes. Special attention is given to those diseases of lower animals that are communicable to man. Certain of the non-communicable diseases of the lower animals are considered, where the comparative study is deemed especially important for the better understanding of the corresponding human maladies. The students are made familiar by practical demonstrations with clinical as well as finer methods of diagnosis. They are also instructed in the measures that are employed for eradicating or controlling these sources of infection to man. The library, laboratory, and clinics of the Veterinary department are available as aids to this instruction. *Three hours a week.* Third Year.

2. An opportunity for advanced and research work will be afforded students who have proper preparation. Elective.

SURGERY.

Professor MCALESTER; Dr. RAND.

1b. (a) Principles of Surgery. Didactic lectures and recitations, ending with a thorough examination. (b) Operative Surgery. This Course includes (1) bandaging, fracture dressings, etc., (2) operations on the cadaver, (3) operations on the lower animals. As careful attention is paid to details as on the human subject. In this course the student does the work under supervision as in other laboratories. *Three hours a week.* Third Year.

2. Clinical Surgery. This course will be given at the Parker Memorial Hospital and the Boone County Infirmary. *Three hours a week.* Fourth Year.

OBSTETRICS AND GYNÆCOLOGY.

*Professor ———.

1. Obstetrics. Lectures and recitations and clinics. A set of Auzoux

*To be appointed before the opening of the next session.

models of the female pelvis, uterus and contents at various periods of gestation, a set of charts, etc., are available for illustration. *Three hours a week. Two semesters. Third and Fourth Years.*

2. Gynæcology. Lectures and recitations and clinics. *Three hours a week. Fourth Year.*

OPHTHALMOLOGY AND OTOTOLOGY.

†Professor NOYES.

1. Diseases of the Eye and Ear. Lectures, recitations and clinics. *Three hours a week. Fourth Year.*

SPECIAL COURSES.

1b. Massage and Medico-Gymnastics. Lectures and demonstrations on the technique of Massage, and the treatment by gymnastics of asymmetry, malnutrition, or impaired functional processes. *One hour a week. Fourth Year. Professor HETHERINGTON.*

2b. Medical Jurisprudence. *One hour a week. Fourth Year. Professor MCALESTER.*

3b. Medical Climatology. Lectures upon climate as related to health and disease. Special attention is paid to the climatic conditions prevalent at the various health resorts. *One hour a week. Fourth Year. Mr. HACKETT.*

PARKER MEMORIAL HOSPITAL TRAINING-SCHOOL FOR NURSES.

The Parker Memorial Hospital Training-school for Nurses is instituted to give three years' training to women desirous of becoming professional nurses.

Those wishing to enter must apply, personally or by letter, to the Superintendent of Nurses at the Hospital, who will furnish instructions respecting the personal information to be given by applicants. The application should be accompanied by a physician's certificate of sound health and unimpaired faculties and two certificates of good character. Applicants must be between the ages of 21 and 35 years, and of at least average height and physique. Women of superior education are preferred.

Candidates, if approved, will be received on probation for three months. They will not be permitted to join the school formally until the end of the third month, when, if accepted, they must sign an agreement to complete the prescribed course of three years, and to conform to all rules.

At the end of the first year, the record of the student will be carefully scrutinized, and the right is reserved to terminate then or at any

†Appointment to take effect in September, 1902.

time the connection of any student with the school for inefficiency, misconduct, a generally unsatisfactory record, or for any other reason which may be deemed sufficient by the Hospital authorities.

In addition to board, lodging, and a reasonable amount of laundry work, the students will be given \$8 monthly to meet expenses incidental to the training. In sickness the students will be cared for but the time so lost must be made up (and money may be deducted from their allowance).

The course will include practical and theoretical instruction in the nursing of medical, surgical, obstetrical, and gynæcological cases, sick diet cooking, massage, and the application of electricity. Instruction will also be given in anatomy, physiology, bacteriology and hygiene.

The final examination for the Diploma will be held by members of the medical and surgical staff.

For catalogues of the Medical Department, address Irvin Switzler, Registrar, Columbia, Mo.

For any further information concerning the Medical Department, address,

A. W. McALESTER, M. D., Dean,
Columbia, Mo.

VI. MILITARY DEPARTMENT

(Created by statute the Missouri State Military School.)

WILLIAM HENRY TURNER, B. S., M. D.,

*Instructor in Military Science and Tactics, and Acting Commandant
of Cadets.*

Requirements for Admission:

No cadet will be received who is less than five feet, one inch in height, or who is any way physically disqualified for military service, or who has not been duly matriculated in some other Department of the University.

All male students of the University not physically disqualified, will be allowed to enroll themselves as voluntary cadets. A copy of the regulations for the government of the cadets is given to each cadet upon his entrance into the Missouri State Military School. Cadets should report by September 12, if possible. Vacancies may be filled at the discretion of the Senators and Representatives.

Battalion Staff and Non-commissioned Staff.

Cadet Officers:

Cadet Major and Acting Commandant.....	W. H. Turner
Cadet Major	E. L. Shepard
Cadet First Lieutenant and Adjutant.....	W. F. Miller
Cadet First Lieutenant and Quartermaster.....	C. B. Davis
Cadet Sergeant Major.....	T. A. Williams
Cadet Quartermaster Sergeant.....	C. J. Sloop

Company A.

Cadet Captain.....	E. E. Lushbaugh
Cadet First Lieutenant.....	M. C. Burk
Cadet Second Lieutenant.....	F. W. Sansom
Cadet First Sergeant.....	L. G. Jones

Company B.

Cadet Captain.....	M. Arnold
Cadet First Lieutenant.....	J. S. Harrison
Cadet Second Lieutenant.....	A. Barrett
Cadet First Sergeant.....	W. M. Krafft

Company C.

Cadet Captain.....	T. O. Ramsey
Cadet First Lieutenant.....	M. M. Dearing
Cadet Second Lieutenant.....	P. Super
Cadet First Sergeant.....	F. J. McCaslin

Company D.

Cadet Captain.....	J. S. Boman
Cadet First Lieutenant.....	R. H. Jesse, Jr.
Cadet Second Lieutenant.....	J. W. Hann
Cadet First Sergeant.....	F. C. Hilder

Band.

Chief Musician.....	F. Pannell (Civilian)
Drum Major.....	A. H. Welch
Chief Trumpeter	J. C. Walker

Those cadets are appointed to office who show ready obedience, zeal, and capacity in the discharge of military duty. The Governor of Missouri issues commissions to those entitled by their battalion rank to receive them.

Equipment and Supplies:

Two hundred and ten Springfield cadet rifles of the latest model; one Gatling gun, cal. 45, with full equipment; two 3.2 inch rifled field guns (breech loaders), with carriages and implements; twenty-five sabres, and a suitable amount of ammunition and target materials, are furnished by the United States. The State supplies ammunition, camp equipage, utensils, etc. The University supplies instruments and instruction for the band.

Prizes:

The Curators have provided an elegant silver cup to be awarded each year to the best drilled company.

A gold medal is usually given to the best drilled private, and a target medal to the best marksman.

Uniforms:

Cadets wear but one style of uniform, known as the undress or fatigue uniform. Uniforms must be worn at all military exercises, and tailor made uniforms are supplied to volunteer cadets at a contract price (about \$12.50). The State usually furnishes uniforms to regularly appointed cadets free of cost (one entire uniform every year to each appointed cadet, depending upon amount of appropriation by Legislature).

COURSE OF INSTRUCTION.

FIRST YEAR.

First year cadets are instructed by the several captains.

Practical instruction in the schools of the soldier, company, and battalion (infantry), and extended order.

Practical instruction in rifle-firing, 100, 200, 300, 400, and 500 yards.

Practical instruction in duties of camp, embracing guard duty, etc.

Recitations in infantry drill regulations through school of the company, ceremonies of guard mounting, dress parade, inspection, review, muster and extended order.

Recitations in guard duty and cadet regulations.

Recitations in artillery tactics, sabre drill, etc.

SECOND YEAR.

Second year cadets are instructed by the Commandant.

Practical instruction in the schools of the company and battalion, and in extended order.

Practical instruction in the service of field-guns (foot battery), with mechanical maneuvers.

Practical instruction in rifle-firing, 100, 200, 300, 400, and 500 yards.

Practical instruction in the duties of camp, embracing guard duty, etc.

Practical instruction in military signaling.

Recitations in infantry drill regulations, school of the battalion.

Recitations in artillery tactics, manual of the piece dismounted, etc.

Recitations in Military Science:

Lectures are given by the Commandant on army organization, the Army of the United States, army regulations, courts martial and military law, the customs of war, security and information (including outposts, advance and rear guards, patrols, reconnoissances, orientation and map reading), guard duty, castrametation, field service, field fortifications, rifle firing, and target practice.

Recitations are held during the winter months, when the weather is unfit for drill. All cadets not included in the two preceding classes are required to take a short review of the previous work.

The artillery detachment will probably be re-established next year. Suitable shelter will be provided for the new cannon by that time.

Certificate of Proficiency:

To have passed through the entire course does not entitle a cadet to receive a certificate of proficiency in Military Science and Tactics, but it is the rule now adopted in the University, that the certificate will be issued to every cadet, State or volunteer, who takes the entire course and attains a grade of at least 70 per cent in *every examination* given during the two years in Military Science and Tactics.

Appointment of State Cadets:

The following extracts from the Revised Statutes, 1899, of Missouri (sections 10561-6 inclusive), will be of interest to those who desire to receive appointments as cadets:

"The Military Department of the University of the State of Missouri as organized under section 1225, Revised Statutes of the United States, and section 10507, Revised Statutes of Missouri, 1899, is created the Missouri State Military School.

"The corps of cadets of the Missouri State Military School shall consist of appointees of Senators and Representatives, and such students as may voluntarily enter such school. All appointments under this section shall be for the term of two years. Each Senator and Representative of the General Assembly of Missouri shall have the power to appoint a cadet from his district by the first day of August of each year: Provided, that if there shall be no application for such cadetship in any district by the first day of August, in any such year, then such appointment may be made from any other district in this State; and, provided, that in case of death, resignation or expulsion from the University of any cadet from such district, the Senator or Representative thereof may fill such vacancy at any time. All appointees under this section shall pass the required examination for admission to the University.

"Cadets receiving instructions, as provided in preceding section, shall be matriculated in all Academic departments, and in the College of Agriculture and Mechanic Arts of the University, free from tuition and other fees.

"The corps of cadets, as provided in the preceding sections, shall have the military organization prescribed for the National Guard of the State and be reckoned a part thereof, and as such entitled to all such provisions as are or may hereafter be made for the National Guard of Missouri.

"The military government and discipline of the cadets shall be prescribed by regulations prepared by the Faculty of the University and approved by the Governor of the State. The officers of the corps of cadets shall be appointed and commissioned by the Governor of the State, upon

the recommendation of the Faculty of the University, and shall have the powers conferred by said regulations.

"Cadets shall be individually responsible for all State property issued directly to them, and shall constitute a guard for the safe-keeping and preservation of all University property."

Regulations:

Cadet regulations prescribe that military drills, etc., shall be held at least three hours a week, one of which shall be for theoretical and two for practical instruction. The regulations require, also, whenever the means of the University permit it, an annual encampment of from eight to ten days, during which the instruction is entirely military and practical. Here the cadets are instructed in all the duties of camp life. They conduct their own commissary and quartermaster departments. They have target practice at 100, 200, 300, and 400 yards, perform the duties of sentinels, patrols, etc., and are given all the drills and ceremonies prescribed by the two years' course. The expenses of the encampment are borne by the University. A copy of the regulations may be secured at the Commandant's office. Every cadet must strictly conform to these rules.

Enrollment:

During the present session 251 cadets have received instruction in Military Science and Tactics.

State Commissions:

Senate Bill No. 66, 39th General Assembly, provides as follows:

"Article III. Section 33. Every graduate of any college in the State of Missouri, in which military instruction is regularly given by an officer of the United States Army, detailed for that purpose, who shall have received military instruction during a course of four years, shall be entitled to a commission as brevet second lieutenant of the National Guard of Missouri, subject to such physical examination as to ability as the commander-in-chief may from time to time prescribe: Provided that application for such commission be made within one year after graduation from such college, and that such applicant shall be at the time a citizen of the State of Missouri."

VII. COLLEGE OF AGRICULTURE AND MECHANIC ARTS

FACULTY.

Except those of the President and the Dean, names are printed in order of appointment.

RICHARD HENRY JESSE, LL. D.,

President.

HENRY JACKSON WATERS, B. S. A.,

Dean of the Faculty, and Director of the Experiment Station.

PAUL SCHWEITZER, Ph. D., LL. D.,

Professor of Agricultural Chemistry, and Chemist to the Experiment Station.

EDWARD ARCHIBALD ALLEN, Litt. D.,

Professor of English Language and Literature.

HENRY CAPLES PENN, A. M.,

Assistant Professor of English Language and Literature.

MILLARD LEWIS LIPSCOMB, A. M.,

Professor of Physics.

JOHN WALDO CONNAWAY, D. V. S., M. D.,

Professor of Comparative Medicine and Veterinarian to the Experiment Station.

LUTHER MARION DEFOE, A. B.,

Assistant Professor of Mathematics.

*JOHN CHARLES WHITTEN, B. S., M. S.,

Professor of Horticulture, and Horticulturist to the Experiment Station.

*SIDNEY CALVERT, B. Sc., A. M.,

Assistant Professor of Chemistry.

FREDERICK BLACKMAR MUMFORD, M. S.,

Professor of Agriculture, and Curator of the Agricultural Museum.

*Absent during session of 1901-2.

HENRY MARVIN BELDEN, A. B., Ph. D.,

Assistant Professor of English Language and Literature.

JOHN MOORE STEDMAN, B. Sc.,

Professor of Entomology, and Entomologist to the Experiment Station.

WILLIAM GEORGE BROWN, B. S., Ph. D.,

Professor of Chemistry.

HOWARD BURTON SHAW, B. C. E., A. M.,

Professor of Electrical Engineering.

CURTIS FLETCHER MARBUT, B. S., A. M.,

Professor of Geology and Mineralogy, and Curator of the Geological Museum.

JOHN NELSON FELLOWS, A. M.,

Professor of Mathematics.

FREDERICK PUTNAM SPALDING, C. E.,

Professor of Civil Engineering.

CHARLES THOM, A. M., Ph. D.,

Acting Assistant Professor (in charge) of Botany.

OSCAR MILTON STEWART, Ph. B., Ph. D.,

Assistant Professor of Physics.

FREDERICK HANLEY SEARES, B. S.,

Professor of Astronomy, and Director of the Lows Observatory.

CLARENCE HENRY ECKLES, B. Agr., M. Sc.,

Assistant Professor (in charge) of Dairy Husbandry.

WALTER ALEXANDER, B. S., M. E.,

Assistant Professor of Mechanical Engineering.

THOMAS CARSKADON JOHNSON, B. S. Agr., A. M.,

Acting Professor of Horticulture.

BENJAMIN BERNARD TURNER, B. Sc., Ph. D.,

Acting Assistant Professor of Chemistry.

RICHARD B. MOORE, B. S.,

Instructor in Chemistry.

THOMAS JACOB RODHOUSE, B. S.,

Instructor in Drawing.

MARY ESTELLE PORTER, B. L.,

Instructor in Commercial Studies.

WILLIAM HENRY TURNER, M. D.,

Instructor in Military Science and Tactics and Acting Commandant of Cadets.

JANE ACKERMAN ZABRISKIE,

Instructor in Household Economics.

ROLLA ROY RAMSEY, A. B., A. M., Ph. D.,

Instructor in Physics.

WALTER SCOTT WILLIAMS, C. E.,

Instructor in Civil Engineering.

EARL BRENTON SMITH,

Instructor in Shopwork.

WALTER LAFAYETTE HOWARD, B. S. in Agr.,

Assistant in Horticulture.

†A. E. HACKETT,

Lecturer on Climatology.

HON. N. F. MURRAY, President of the State Horticultural Society,

Non-resident Lecturer on Horticulture.

HON. L. A. GOODMAN, Secretary of the State Horticultural Society,

Non-resident Lecturer on Horticulture.

*D. F. LUCKY, D. V. S., State Veterinarian,

Non-resident Lecturer on Veterinary Surgery.

SPECIAL LECTURERS TO THE SCHOOL OF ENGINEERING.

HIRAM PHILIPS, President of the Board of Public Works, St. Louis, Mo.

E. E. WALL, Assistant Engineer in the Sewer Department, St. Louis, Mo.

J. A. OCKERSON, Member of the Mississippi River Commission, Chief of the Department of Liberal Arts of the Louisiana Purchase Exposition.

H. H. HUMPHREY, Consulting Electrical Engineer, St. Louis, Mo.

J. G. D. MARK, Assistant Professor of Machine Design, University of Wisconsin.

For new appointments to take effect at the beginning of the next session, and for other positions to be filled before that time, see page 26.

Historical Statement:

This College had its origin in the beneficence of National, State, and local governments. Its location, objects, and aims are defined in the fol-

† In the service of the U. S. Government.

* In the service of the State Board of Agriculture.

lowing extracts from the Acts of Congress and the laws of the State of Missouri:

"Its leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to Agriculture and the Mechanic Arts, in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life." (Act of Congress, 1862, Sec. 4.)

"There is hereby established the Agricultural and Mechanical College, and a School of Mines and Metallurgy, provided for by the grant of the Congress of the United States, as a distinct Department of the University of the State of Missouri." (R. S. of Missouri, Sec. 8738.)

"To effect the said leading objects of the College, as herein established, it is provided that the students and members thereof shall be admitted to the libraries, museums, models, cabinets, and apparatus, and to all lectures and instruction of the University which now exist or may hereafter exist, and to all other rights and privileges thereof, in a manner as full and ample as the students of any other Department in said University; and to provide for instruction in military tactics, as herein required, it is enacted that in case a system of military education shall be established by Congress, the State University is hereby required by law to make the necessary provision for carrying out the plan so established in connection with the institution." (R. S. of Missouri, Sec. 8741, p. 2017.)

"The Agricultural and Mechanical College, and the School of Mines and Metallurgy here provided for, shall have each a separate and distinct Faculty, whose officers and professors may be the same in whole or in part as the officers and professors in other Colleges and Departments of the University." (R. S. of Missouri, Sec. 8742.)

"In consideration of the permanent location of the Agricultural and Mechanical College in connection with the State University the county of Boone shall donate not less than \$30,000 in cash, to be used in erecting such buildings and making such improvements as may be needed for such College, and also for a Mechanical College in connection with the State University, and that the same shall be held for the uses and purposes of said Agricultural and Mechanical College." (R. S. Missouri, Sec. 8744.)

In accordance with the above provisions, the citizens of Boone county made a donation of \$90,000 for the erection of a building and the purchase of lands for an experimental farm and this College was permanently located at Columbia as a Department of the University, and the School of Mines and Metallurgy was located at Rolla, in Phelps county. The latter

is under the same general control as the College of Agriculture and Mechanic Arts.

Endowment of the College:

1. The proceeds of the sales of public lands donated to Missouri by the act of Congress of July 2, 1862. The State received as her share two hundred and seventy-five thousand acres, of which there have been sold up to date two hundred and thirty thousand nine hundred and three acres, yielding three hundred and fifty-five thousand dollars. This sum is invested in State certificates of indebtedness, at 5 per cent. and yields seventeen thousand five hundred dollars. Of this amount one-fourth is by law appropriated to the support of the School of Mines and Metallurgy, at Rolla.

2. The annual appropriation of \$25,000, under the act of Congress of August 30, 1890 (Morrill bill). Of this amount about one-sixteenth is by law appropriated to the "Lincoln Institute," at Jefferson City, for the education of negro children in Agriculture and Mechanic Arts, and one-fourth of the remainder is given to the School of Mines and Metallurgy, at Rolla.

3. The College Farm, which cost originally \$60,000.

4. Thirty thousand dollars in money from Boone County.

The above sums, together with the assistance derived from the association of the College of Agriculture with the University, furnish an abundant income for all purposes of instruction and scientific investigation.

Organization:

The College is divided into three divisions, as follows:

A—The School of Agriculture.

B—The Experiment Station.

C—The School of Engineering.

A. SCHOOL OF AGRICULTURE.

Requirements for Admission:

Candidates for entrance to the Collegiate Course in Agriculture will be required to furnish satisfactory evidence of having completed the equivalent of twelve units of approved High School work. For the session of 1902-3 they may, however, be admitted on ten units, the remaining two units to be passed by the beginning of the Junior year. For detailed information see pages 30-9.

No entrance examination or special preparation is required for admission to the Short Winter Courses.

I. SHORT WINTER COURSE IN AGRICULTURE.

(See Special Circular.)

This course is designed to meet the wants of a large number of young men who can not afford the time or the money necessary for a regular college course in agriculture, and yet desire a better preparation for their life work than can be acquired on the farm.

To suit the convenience of farmers the course is given in the winter. It is open to all over sixteen years of age, and no entrance examination or special preparation is required. Any intelligent person with a common school education will be able to pursue this course with profit. An entrance fee of \$5 and \$2 for each laboratory or shop taken cover all college expenses.

It is the aim to give the student the largest amount of thoroughly practical information about farming, stock breeding, stock judging, dairying, gardening, fruit-growing, veterinary science, carpentry, and blacksmithing, possible in twelve weeks, and, at the same time, instruct him in the elements of Chemistry, Geology, Entomology, and Botany as applied to Agriculture and Horticulture.

The instruction is imparted by means of lectures, and practical demonstrations on the farm, in the barn, the dairy, the live stock building, the greenhouse, the laboratories, and the machine shops of the College.

The course consists of 254 lectures and exercises, divided as follows:

Agriculture, 120; Horticulture, 40; Dairying, 9; Agricultural Chemistry, 15; Economic Entomology, 10; Veterinary Science, 24; Carpentry and Blacksmithing, 18 exercises of two and one-half hours each; Book-keeping and Farm Accounts, 6 exercises of two and one-half hours each; Butter and Cheese-making, 12 exercises of two and one-half hours each.

For description of work given in the Short Winter Course see Courses in Detail, pp. 140-55.

II. SHORT WINTER COURSE IN HORTICULTURE.

(See Special Circular.)

With a view to aiding in the development of the Horticultural interests of the State by the dissemination of correct information concerning the best modern methods in the management of nurseries and orchards and in the growing of small fruits, flowers, and vegetables on a commercial scale, and by instruction in the application of the sciences underlying these arts, a short winter course in Horticulture, parallel with the short course in Agriculture, is offered. This course is open to all persons over

sixteen years of age, and no entrance examination is required. An entrance fee of \$5 and \$2 for each shop or laboratory taken cover all charges.

This course consists of 267 lectures and exercises, as follows: Horticulture, 108 (including Nursery Work, 24 lectures and 12 afternoons at practice in the nursery and grafting shops; Orchardng and Small Fruit Growing, 24 lectures and 12 afternoons in the orchards and vineyards; Market Gardening, 24 lectures and 12 afternoons, spent in propagating vegetables, etc.); Landscape Gardening, 10 lectures; Fungous Diseases and Fungicides, 20 lectures; Entomology, 60 lectures; Botany, 16 lectures; Manures, 10 lectures; Drainage, 5 lectures; Sanitary Science, 10 lectures; Book-keeping, 6 exercises of two and one-half hours each; Carpentry and Blacksmithing, 18 exercises of two and one-half hours each; Steam Heating and Steam Fitting, 4 lectures.

The special lecturers in this course were Hon. N. F. Murray, President State Horticultural Society, Oregon, Mo., 24 lectures and 24 practical exercises on Nursery Work; Hon. L. A. Goodman, Secretary State Horticultural Society, Westport, Mo., 24 lectures and 24 practical exercises on Orchardng and Small Fruit Growing.

These short courses (I and II), beginning Tuesday, December 30, 1902, will be continued daily except Sunday until March 23, 1903.

III. SHORT WINTER COURSE IN DAIRYING.

(See Special Circular.)

This course is designed especially for those who wish to obtain a knowledge of modern dairy practice as related to the creamery and the cheese factory, and at the same time to study the scientific principles upon which this practice is based.

The facilities for teaching dairying provided by our new building and equipment are unexcelled. While special attention will be given to the manufacture of dairy products, feeding for the production of milk and study of dairy breeds and dairy types will be included. The dairy building is supplied with a complete equipment for separating and testing milk, making butter and cheese and pasteurizing milk. This course is open to any one having a common school education. It begins December 30 and continues eight weeks. The lectures in this course are as follows:

Milk Testing, 15 lectures; Milk and Butter Making, 20 lectures; Machinery, 10 lectures; Dairy Bacteriology, 20 lectures; Cheese Making, 15 lectures; Breeding and Selection of the Dairy Cow, 10 lectures; Feeding the Dairy Cow, 10 lectures.

Those especially interested in cheese making are expected to do their practical work in the cheese room, and those interested in creamery work, in the creamery room. The practical work will occupy from three to four hours a day, either in testing, butter-making, or cheese-making.

Farm Dairy Instruction. A large number of students are interested in dairying, with a view to becoming dairy farmers. This class should take the Short Course in Agriculture and do considerable practical work in dairying.

Full details of all of these short courses will be given in a special circular, which will be ready for distribution in September, 1902, and will be sent free upon application to the Dean of the College.

IV. COLLEGIATE COURSE IN AGRICULTURE.

There is a constantly increasing demand for thoroughly well trained men in Agriculture. Graduates of the collegiate course are in great demand as farm managers, experiment station workers, teachers of Agriculture, and editors of agricultural newspapers. The sons of farmers, also, who will eventually become owners and managers of farms will find this course especially adapted to their needs.

The impression that this Course is less practical than the Short Winter Course is wholly unwarranted. The instruction in the practical subjects is more thorough than is possible in the shorter courses. The instruction given in the related sciences is essential to a clear understanding of the principles and methods of practice.

The Course includes general culture subjects and the opportunities for free electives make it possible for the student to secure a liberal education while pursuing the technical work of the Course.

SCHEME OF STUDIES.

Freshman Year.

First Semester.	Second Semester.
8:30 Agronomy, M. W. 2	8:30 Agronomy, M. W. 2
8:30 to 10:30 Agronomy, F. . . 1	8:30 to 10:30 Agronomy, F. . . 1
10:30 to 12:30 Shop, M. W. F. . 3	10:30 to 12:30, Shop, M. W. F. . 3
8:30 English, T. Th. S. 3	8:30 English, T. Th. S. 3
1:30 to 4:00 Botany, M. W. F. 3	1:30 to 4:00 Botany, M. W. F. 3
1:30 to 4:00 Physics, T. Th. S. 3	1:30 to 4:00 Physics, T. Th. S. 3

Sophomore Year.

First Semester.		Second Semester.	
8:30 Horticulture, M. W. F....	3	8:30 Horticulture, M. W. F....	3
9:30 Stock Breeding, T. Th. S..	3	9:30 Animal Husbandry, T. Th.	
9:30 to 12:30 Chemistry, M. W.		S.	3
F.	3	9:30 to 12:30 Chemistry, M. W.	
1:30 to 4:00 Drawing, T. Th. S.	3	F.	3
Elective	3	1:30 to 4:00 Dairying, T. Th.	
		S.	3
		Elective	3

Junior Year.

First Semester.		Second Semester.	
8:30 Horticulture, T. Th. S. ..	3	10:30 Entomology, M. W. F. ..	3
10:30 Agricultural Engineering,		10:30 Stock Feeding, T. Th. S.	3
T. Th. S.	3	1:30 to 4:00 Veterinary Sci-	
1:30 to 4:00 Veterinary Sci-		ence, T. Th. S.	3
ence, T. Th. S.	3	Elective	6
Elective	6		

Senior Year.

First Semester.		Second Semester.	
9:30 Geology, T. Th. S.	3	10:30 Agricultural Chemistry, T.	
10:30 Agricultural Chemistry, T.		Th. S.	3
Th. S.	3	Elective	12
Elective	9		

Required Work:

All students who are candidates for a degree must satisfactorily complete 120 hours of work. Of this work, 81 hours must consist of the subjects laid down in the foregoing schedule.

Elective Work:

Students who have finished the required courses in any subject may elect work in accordance with the advice and approval of the Dean. Sufficient time is given for electives in the course so that students in the upper classes may concentrate their energies upon a chosen line of work. It is advised in all cases that students elect not only a technical subject but also related science courses. A student who specializes in Horticulture should also do special work in Botany and Entomology while a

student who elects Animal Industry as a major should take certain courses in Zoology and Veterinary Science. It is expected that those who intend to engage in College or Experiment Station work will elect modern languages at the beginning of the Sophomore year. The students should in all cases advise with the Professors and secure the written approval of the Dean before electing courses.

The degree of Bachelor of Science in Agriculture is conferred upon all students who successfully complete the course.

Graduate Work:

All students who desire to prepare themselves for Agricultural College or Experiment Station work need a more specialized and thorough training than can be given in the undergraduate courses. For graduate work see under Courses in Detail, below, and also p. 60.

COURSES IN DETAIL.

[The letter "a" after a number means that the work is given in the first semester only; the letter "b," that it is given in the second semester only. A simple number means that the work runs through the entire session. Work in the Short Winter Courses is indicated by a "w" after the number.]

Agriculture

Professor MUMFORD, Dean WATERS, and *Dr. TUCKER.

The instruction in this subject is thoroughly practical, and is intended to give a knowledge of the application of the natural sciences to the complex operations of Agriculture. Lectures and recitations are supplemented by practical demonstrations on the farm. In the class room the student becomes familiar with the best rations, for example, and in the barn studies the effect of these rations, and determines their practical value. The study of live stock is based upon an examination of a large number of animals, so that the student begins the subject with a knowledge of the best types for various purposes.

1a. Agronomy. A. *Soils.* A study of the origin, formation, distribution, and classification of soils with reference to their agricultural value; the conditions of fertility and the circumstances that influence it; indications of fertility; barren and exhausted soils; improvement of soils; physical properties of soils, including their relations to air, water, and heat; capillarity, diffusion, and solution, as related to soil texture;

*Appointment goes into effect in September, 1902.

farm drainage, including methods of construction; irrigation, tillage, plowing, subsoiling, harrowing, etc. B. *Fertilizers*. Constituents of plants; sources and specific action of the various elements of plant food; crops and materials used as fertilizers; methods of farming in relation to the conservation of fertility. Two lectures and one laboratory period per week. *T. Th. S., at 9:30.* Dr. TUCKER. Freshman.

1b. Agronomy. *Farm Crops*. Plant breeding; variation, selection, self and cross fertilization; practical methods for increasing the yield of crops; conditions of germination and plant growth; rotation of crops; planting, growing, harvesting and storing crops. The results of experiments at the Station are used in discussing the best methods of culture. The Missouri Experiment Station offers excellent opportunities for the illustration of this work. *T. Th. S., at 9:30.* Dr. TUCKER. Freshman.

(Courses 1a and 1b are elective for students in the Department of Education who are candidates for the Life Certificate).

2a. Stock Breeding. This work begins with a careful study of the types of domestic animals. The score card is the basis in judging beef and dairy cattle, draft and light horses, mutton and wool, sheep and swine. After the student has become familiar with the most approved types, he studies the principles and methods of successful breeding, such as heredity, atavism, variation, selection, fecundity, influence of environment, in-breeding, cross-breeding, grading, telegony, etc. *M. W. F., at 10:30.* Professor MUMFORD. Sophomore.

2b. Animal Husbandry. Special study of the live stock industry in its relation to other methods of farming. A study of the breeds of live stock, and special instruction in the breeding, feeding and handling of cattle, horses, sheep and swine. *M. W. F., at 10:30.* Professor MUMFORD. Sophomore.

3a. Agricultural Engineering. Construction of barns, stables, and other shelters; plans for building silos, fences, etc. Road building is considered with special reference to country roads. Some attention is given to the mechanics of farm implements and machines. For this purpose a new self-registering dynamometer has been provided. There is also a model of a horse arranged for determining by experiments the influence on draft of direction of traces, weight of horse, strength of hock muscles, etc., and an appliance for measuring the resistance to tractive force of incline and obstruction. *T. Th. S., at 8:30.* Dr. TUCKER. Junior.

3b. Stock Feeding. The laws of animal nutrition; composition of the animal body; fodders, the source of nutrients; digestion, resorption, circulation; respiration and excretion; formation of muscle, flesh, and

fat; composition and digestibility as determining the value of feeding stuffs; their preparation and use; feeding for fat, milk, wool, work, and growth. *M. W. P., at 9:30.* Professor MUMFORD. Junior.

4a. Judging Live Stock. Original research and practice in judging the domestic animals. Material for this work will be obtained on the College Farm and on the farms of breeders where typical animals are bred. *Two laboratory periods weekly.* Professor MUMFORD. Elective.

5a. Animal Breeding. Original research and experimentation. A suitable breeding laboratory has been provided in which actual experiments will be in progress. The unsettled problems of breeding such as the relative influence of parents, telegony, in-breeding, influence of age on prepotency, etc., will be investigated. For graduates and undergraduates. Professor MUMFORD. Elective.

6a. Research and Experimental work on Soils. The work of the U. S. Soil Survey in this State places particularly favorable opportunities within reach of students. Dr. TUCKER. For graduates.

7. Seminary. Reading and discussions by instructors and students of recent special investigations in Agronomy. Original papers upon assigned topics will be presented for discussions; each student will be expected to contribute at least four such papers during the year. A reading knowledge of French and German is required. *One hour a week.* Dr. TUCKER. Elective.

8. Seminary Studies of Experiment Station Bulletins. Students are required to make abstracts of a sufficient number of bulletins, bearing on a selected line of work, to become familiar with their scope and aim. Original papers are prepared by the students and discussed by all the members of the class. *One or two hours a week.* Professor MUMFORD. Elective.

8w. Stock Feeding. The composition and digestibility of feeding stuffs; the preservation and preparation of coarse fodders; hay-making; ensilage; steaming and cooking food; feeding standards, and the calculation of rations; growth and fattening; feeding for meat, milk, wool, etc.; effect of food upon the quality of the meat, wool, milk and butter. Practice will be given in computing and compounding balanced rations for the various purposes named. Dean WATERS.

9w. Farm Crops. Conditions of germination and plant growth; special requirements of the various farm crops; rotation, cultivation, harvesting, and storing of crops; best varieties of corn, wheat, etc., for Missouri; some discussion of promising new crops, especially fertilizing crops,—Cow peas, Soy beans, Alfalfa, etc. Dean WATERS.

10w. Stock Breeding: Twenty-four lectures on the principles of breeding live stock. Special attention will be given to the practical application of the principles to actual methods employed in the improvement of the domestic animals. Professor MUMFORD.

11w. Judging Live Stock. Twenty-four laboratory periods in judging horses, cattle, sheep and swine. Professor MUMFORD.

12w. Soils. Thirty-six lectures on the origin and formation of soils, their chemical and physical properties and practical methods of increasing their productiveness. Special attention is given to tillage and tillage implements. This course will include also a discussion of fertilizers, manures, and drainage. Dr. TUCKER.

Facilities for Instruction and Research:

Libraries.—The Agricultural Library contains more than 3,500 bound volumes and 1,000 pamphlets. One of the most valuable features of this library is a complete file of the publications of every Experiment Station in the United States, neatly bound, and fully indexed. Files of the leading agricultural papers are accessible in the reading room. The general library of the University contains many volumes of great interest to students in agriculture. All the libraries of the University together have more than 48,000 volumes.

The Agricultural Museum.—The value of a museum is mainly in furnishing illustrative material for study, and to this purpose the Agricultural Museum is well adapted. It contains a collection of wool fibers illustrating the influence of breeding and environment; a large assortment of cotton fibers and of fiber plants from various countries; and a systematic collection of the agricultural grasses of the United States. The forest woods of the State are represented by block specimens showing transverse sections and bark characteristics, and by a collection of polished boards. In live stock there are skeletons of a horse, and hog, and two stuffed specimens of the wild white cattle of Great Britain.

The Farm.—The farm is fully equipped with improved agricultural machinery, a dairy building, hay and stock scales, a silo, sheep, cattle, and horse barns, and model swine pens. The farm and its equipment is used primarily for the instruction of students.

Live Stock.—For the instruction of students in animal husbandry, the farm maintains typical specimens of the leading breeds of live stock. Among the breeds of cattle are a fine herd of Jerseys, and excellent specimens of the Short-horn, Aberdeen Angus, Hereford, and Holstein Friesian breeds. A herd of grade steers are fattened each season. There are specimens of the leading breeds of sheep and swine, together with grade animals.

Live Stock Building.—The last legislature made a liberal appropriation for a building to be used for live stock instruction. This building will be used for veterinary work and live stock judging. The judging room is well lighted and heated so that the judging exercises will not hereafter be interrupted by cold or inclement weather. The whole building is constructed of native limestone and is conveniently located near the stables and feed lots. This addition to the college equipment for teaching animal industry makes it possible to offer a special short course in live stock husbandry. The time devoted to animal industry in the long course has also been increased fifty per cent.

Experiment Station.—The experiments constantly in progress by the station workers are of the highest instructional value to the students in animal industry and agronomy. It will be the aim of the department to encourage students to follow carefully such lines of work as pertain to the subjects discussed in the class room.

Practical Excursions.—Visits to successful farms and breeding establishments under the guidance of an instructor for the study of special phases of agriculture. This feature has proved an exceedingly valuable one in studying the application of the principles taught in the class room.

Dairy Husbandry

Assistant Professor ECKLES.

1b. Elements of Dairying. This Course includes two lectures and one laboratory period a week. The lectures treat of the secretion and composition of milk and the causes of variations; the Babcock test applied to milk, and other products; use of the lactometer; the various methods of cream raising, including a study of the centrifugal separators; the ripening of cream; modern methods of making and marketing butter; judging quality of butter; proper handling of milk on the farm; the relation of the factory and private dairy to the farmer. The laboratory work includes testing milk and other dairy products, separating cream and making butter and cheese. *T. Th. S., 1:30-4.* Sophomore.

2a. Factory Butter-making. This Course consists of one lecture and two laboratory periods a week. It includes a study of the modern factory systems in detail, including a careful study of testing milk and its products under varying conditions; ripening cream; use and propagation of artificial and natural starters; churning and working butter; the business management of the factory. The practical work will be along the line of the lectures, including such as will best acquaint the student with the operations of a modern factory. *Hours to be arranged.* Elective.

3b. Cheese-making. This Course will include five hours, two days per week, and will count as a four hour study. One hour per week of this period will be given to lectures on the methods and theories of cheese-making which will be put into practice in the laboratory. *M. W. F.*, 9:30-12:30 and 1:30-3:30. Elective.

4a. Dairy Bacteriology. One hour per week will be given to lectures on the contamination of milk and its control, normal and abnormal fermentations and their relation to dairying, milk as a means of spreading disease, the relation of fermentations to butter-making and cheese-making, and the propagation and use of pure cultures and natural starters. The laboratory work will be a study of the means by which milk becomes contaminated; the isolation and study of a number of common organisms; a careful study of the acid fermentation, ropy milk, bitter milk, and other common types; estimating number of bacteria in milk; effect of certain species on butter and cheese. *M. W. F.*, 1:30-3:30. Elective.

5b. Dairy Farming. This Course covers the field of dairying in its relation to the producer rather than the manufacturers. The selection, breeding and building up of a dairy herd is considered; the proper care under different conditions; the growing of crops with the dairy as the center of the system; the use of the silo; special problems of feeding for milk production; marketing dairy products; the use of by-products from the dairy. *Hours to be arranged.* Elective.

6b. Dairy Farming. The selection, breeding, and building up of a dairy herd, growing crops for the dairy, use of the silo, problems of feeding for milk production, marketing dairy products, use of by-products from the dairy. *Hours to be arranged.* For Undergraduates and Graduates.

7a. Dairy Bacteriology. Lectures and laboratory work. Contamination of milk, normal and abnormal fermentations, and relation to dairying; use of pure cultures and starters; spread of diseases by milk. *Three times a week. Hours to be arranged.* For Undergraduates and Graduates.

8. Dairy Bacteriology. This will be laboratory investigation of certain problems of bacteriology in relation to dairying, the object being chiefly to give training in methods of research in this line. The work will be adapted largely to the individual student. For Graduates.

9. Investigations of unsolved problems in butter and cheese-making. This will be chiefly laboratory work and will be arranged to suit the needs of individual students. For Graduates.

Facilities for Instruction and Research:

The new Dairy Building provided by the Forty-first General Assembly is a stone structure 45 feet by 150 feet, two stories, with cheese

curing rooms in the basement. It contains a creamery room 40'x51' so arranged that ten power separators and churns, etc., in proportion may be operated by students at one time; a cheese room 40'x42'; a farm dairy room 22'x40'; pasteurizing, refrigerating and cold storage rooms; milk testing and research laboratories, a library and lecture rooms. New and modern equipment will be provided for all phases of the work. It is expected that this dairy will be operated throughout the year so as to insure an adequate supply of milk for instructional and research work.

A herd of nearly fifty dairy cows consisting of registered Jerseys and Holsteins is owned by the College.

Horticulture

*Professor WHITTEN; Acting Professor JOHNSON; Mr. HOWARD; Mr. MURRAY and Mr. GOODMAN.

1a. Horticultural Methods. Lectures. The work consists of lectures, supplemented by required readings and practical exercises. The propagation, transplanting, cultivation, pruning, gathering and marketing of orchard fruits, together with the diseases and their treatment, are the principal topics discussed. When necessary, the lectures are given in the field, the green-house, or the propagating rooms, in order that they may be illustrated by practical object lessons. Each student is required to make cuttings and grafts, transplant, prune, etc., performing as many of the various horticultural operations as the time will permit. *M. W. F.*, at 8:30. Professor WHITTEN. Sophomore.

2b. Principles of Horticulture. Lectures. Principles underlying the various horticultural operations; plant growth and behavior of plants under culture; variations, selection, and crossing with reference to plant breeding. In this course the aim is to acquaint the student with the reasons for the various horticultural operations—how and under what conditions seeds germinate, cuttings take root, grafts unite, and wounds heal; what environments cause variation in plants; how our cultivated plants are brought to perfection from their wild types; how and why cultivation affects plants. *M. W. F.*, at 8:30. Professor WHITTEN. Sophomore.

(Courses 1a and 2b are elective for students in the Department of Education who are candidates for the Life Certificate.)

3a. Small Fruits and Vegetable Gardening. Lectures, recitations and assigned readings. This course will consist of a study of the small fruits and garden vegetables. In connection with the fruits, a study of

*Absent during session of 1901-2.

the planting, cultivation and attention to the principal diseases, harvesting and marketing, will be made. With the vegetables, especial attention will be given to forcing and market gardening, but other features, such as fungous diseases, etc., will be duly considered. *T. Th. S., at 8:30.* Professor WHITTEN. Junior.

4a. Origin and Development of Cultivated Plants. Lectures and assigned readings. A discussion of the principles underlying the theory and practice of the modification and improvement of cultivated plants. Open to students who have taken Courses 1 and 2 in Botany. *M. W. F., at 9:30.* Professor WHITTEN. Elective.

5b. Forestry. Lectures. In this course are considered the influence of forests on climate, soil, and flow of streams; the management of forests; the characteristics and uses of typical woods; the specific characters of our principal forest trees in their winter condition; and some of the forest geography of the country. *T. Th. S., at 8:30.* Mr. HOWARD. Elective.

6b. Landscape Gardening. Lectures. Laying out and planting of ornamental grounds, the making of roads, lawns, flower and shrubbery borders, the consideration of trees, shrubs, and flowering plants, are the principal topics of this course. *T. Th. S., at 9:30.* Mr. HOWARD. Elective.

7. Special Investigation. This course is intended for graduates and advanced students. Special topics for investigation will be assigned. Hours by appointment. Professor WHITTEN. Elective.

8w. General Horticulture. (Short Winter Course in Agriculture.) Forty Lectures. Construction and management of hotbeds and cold frames; propagation of plants, including germination of seeds, making cuttings, budding, grafting, and layering; pruning and cultivating orchards and small fruits, and spraying for insects and fungous diseases; originating and improving varieties of fruits and vegetables by cross-fertilization, selection and cultivation. Professor WHITTEN.

9w. Nursery Work. Through January, in Winter Course in Horticulture. Lectures and Laboratory. Twenty-four lectures on practical nursery work, embracing grafting, budding, packing for storage or shipment, growing and grading nursery stock, etc. In addition to the lectures, twelve afternoons will be devoted to the actual work of grafting, budding, grading, packing, etc. Mr. MURRAY.

10w. Orchards and Small Fruits. Through February, in Winter Course in Horticulture. Lectures and practical exercises. Twenty-four lectures, treating of soils and localities adapted to fruit; varieties; time and manner of planting; pruning; cultivation and general treatment; harvesting and marketing fruits. Twelve afternoons will be devoted to

practical work in laying out, planting and pruning orchards; and to grading and barreling apples. Mr. GOODMAN.

11w. Market Gardening and Hotbed Forcing. Twenty-four lectures, treating of the planting, growing, and marketing of the ordinary garden crops, hotbed construction; mixing soils, planting, transplanting and watering, bunching, marketing, and hotbed methods. In addition to these lectures, twelve afternoons will be devoted to practical work in growing tomatoes, asparagus, pie-plant, lettuce, radishes, etc. Through March, in Winter Course in Horticulture. Mr. HOWARD.

12w. Floriculture, Landscape Gardening, Fungous Diseases and Fungicides. Through February and March, in Winter Course in Horticulture. *Floriculture*.—Ten lectures and four practical exercises in the propagation and culture of flowers, including the making of cuttings, the mixing of soils, potting, watering, managing temperatures, germination of seeds, marketing cut flowers, etc. *Landscape Gardening*.—Ten lectures on the laying out and planting of grounds, the making of drives and walks, the planting, pruning and management of trees, shrubs and flowers. *Fungous Diseases and Fungicides*.—Twenty lectures, setting forth the nature of the destructive diseases of orchard trees, small fruits, and other plants; the cause of the various rots, blights, rusts, mildews, scabs, and other fungous diseases which prevail in our State. The nature of the attacks of these diseases upon plants, and how they spread from tree to tree and orchard to orchard will be made plain. The best means of checking their attacks by sanitary methods and by spraying will be discussed and ample practice will be given in mixing, testing, and applying spraying solutions. Professor WHITTEN and Mr. HOWARD.

Facilities for Instruction and Research:

The Horticultural Grounds include 32 acres, containing a well-planted lawn with shrubbery and flower borders, collections of various kinds of small fruits and grapes, and representative varieties of stone fruits, apples, and pears. Over 1,000 varieties of orchard fruits are now growing on the grounds. Nut trees from selected stock have been put out and our native wild fruits are being collected and planted. Many kinds of vegetables are grown every year.

The new Horticultural Building provided by the last General Assembly affords class rooms, laboratories and laboratory facilities not excelled by any institution in the country. It is a stone structure 54'x120', two stories and a well lighted basement, with a plant house 16'x50' and an insectory 16'x50' attached. A separate plant house with apartments especially adapted to different classes of plants, and commodious propagat-

ing houses and hotbeds, afford excellent facilities for instruction in the methods of propagating and forcing plants. The library has been doubled in size during the past two years and now contains the standard treatises on all phases of the subject. In the Horticultural Museum are some 700 jars of preserved fruits and vegetables which were especially prepared for illustration and instruction.

Entomology

Professor STEDMAN.

The instruction in Entomology is given by lectures supplemented by laboratory and field work. As far as practicable the student collects and studies his own specimens. The collecting is done systematically in the fall while the insects are alive; later, the field work is entirely replaced by laboratory work. The collecting includes the work done by insects, as well as their eggs, larvæ, pupæ, and adults, while their habits and economy receive due attention. The lectures cover the external and internal anatomy, life histories, habits, economy, and classification of insects; the characteristics of the orders, sub-orders, and principal families, with special emphasis upon those of economic importance, and the best methods of combating their ravages. The laboratory work embraces the study, by means of actual specimens, of the internal and external anatomy, of life histories, habits, economy, breeding, identification, or determination of genera and species, and the classification of those insects found in our fauna; and also economic work and original investigation for advanced students.

The following Courses are offered:

1b. General Entomology. (1) Lectures. Internal and external anatomy, life histories, habits, economy, characteristics, classification, methods of destruction, machines and insecticides, apiculture. *W. F., at 10:30.* (2) Laboratory work, collecting, preserving, breeding, methods, habits, life histories, work, external anatomy, identification or determination of orders, families and genera, classification. *M., at 1:30.* Junior.

2w. Economic Entomology. (For students of the Short Winter Course.) See special Catalogue to be issued in September, 1902.

3. Advanced Entomology. Lectures and laboratory work. Internal anatomy, histology, physiology, embryology, breeding, life histories, habits, economy, distribution, dimorphism, mimicry, determination of species, classification. *Hours to be arranged.* Elective.

Must be preceded by Course 1b.

4. Graduate work in Entomology. Laboratory work. Monographing a group (scientific); monographing a species (scientific and economic). *Hours to be arranged.* Must be preceded by Course 3.

All courses in Entomology are elective for Academic and other students. Agricultural students may elect Course 3 in the Senior year, and Course 4 in the Graduate years.

Facilities for Instruction and Research:

The Entomological department occupies a portion of the first and second floors of the new Horticultural Building and has attached to the laboratories a new insectory 16'x50'. The laboratories are supplied with the necessary microscopes, dissecting instruments, glassware, microtomes, paraffin bath, hot oven, large and small breeding cages and jars, aquaria, spraying machines of various kinds, insecticides and reagents. In the Entomological Museum are collections of the more important injurious and beneficial insects, so arranged as to illustrate their habits of work and life histories. In addition to this collection there are several thousand species of adult insects from all orders, correctly classified and labeled, accessible to the student for reference and comparison and for illustrating lectures. Twelve current periodicals on Entomology are received and kept in the reading room with the Entomological, Horticultural and Botanical libraries, where they are accessible to students at all times.

Agricultural Chemistry

Professor SCHWEITZER.

1a. Agricultural Chemistry.

General introduction; functions of the plant, including production, conversion, transportation, deposition of organic matter; physiological structure of the cell; respiration; the green cell, an apparatus for doing work dependent upon light and heat; nitrogenous constituents of the plant and their relation to free and combined nitrogen; mineral constituents; membranous diffusion; assimilation; condition of vegetation. *T. Th. S., at 11:30. Junior.*

1b. Agricultural Chemistry.

Soil—its formation, composition, alteration by mechanical, chemical, biological agencies; its relation to light, heat and moisture. Soil physics in general. Manures, natural and artificial—their composition, application, value. Theory of rotation of crops; extensive and intensive cultivation; industrial agriculture in general. Farm sanitation; air, respiration, vitiated air and ventilation, infection, contagion, germ theory of disease. Water—potable water, hard and soft; impurities in it, and their effects upon health and life. Food—composition and general properties; preservation of food; and food adulterations. *T. Th. S., at 11:30. Junior.*

Veterinary Science

DR. CONNAWAY; DR. LUCKY.

1a. The Anatomy, Physiology, and Hygiene of domesticated animals. This Course is given by lectures and laboratory work, the latter consisting of the complete dissection of one or more animals, and a comparative study of such organs as show variations in the different species. Charts, models, and prepared specimens will also be available for illustrating this study. Practical demonstrations will be given in the Physiological laboratory of the more important functions of the animal body. The study of food stuffs and the action of the digestive fluids will receive special attention. *T. Th. S., 1:30-4. Junior.*

2b. Veterinary Medicine and Surgery. The first half of the semester is devoted to the study of the common diseases that affect the internal organs; lungs, stomach, intestines, urinary organs, etc.; the second half of the semester is given to the study of the diseases and conditions that require surgical treatment, such as lameness, wounds, abscesses, tumors, etc. A clinic is held one afternoon of each week for the treatment of the diseases discussed in the class room. In proper season instruction is given in castration, spaying, and caponizing. *T. Th. S., at 1:30-4. Junior.*

3a. Contagious, Infectious, and Parasitic Diseases. This Course will include the study of influenza, strangles (distemper), glanders, black-leg, anthrax, tuberculosis, Texas fever, actinomycosis (lump jaw), swine plague, hog cholera, and internal and external parasitic diseases, such as tape worm in lambs, verminous bronchitis, scabies, etc. Practical exercises are given in disinfection of stables, and in preventive inoculation. Lectures on National and State Quarantine Regulations will be given by the State Veterinarian. *M. W. F., at 1:30. Senior. Elective.*

4. Experimental Study of the Contagious and Infectious Diseases of farm animals, such as tuberculosis, glanders, hog cholera, Texas fever, rabies, etc. The student will make inoculations, study and record clinical phenomena, make post mortems, preserve the diseased tissues and study them microscopically. A study of the literature of each disease is also required. Open to graduate veterinarians, who may be interested in inspection and quarantine work; also to Agricultural and Medical students who have completed the required work in Histology, Physiology, Bacteriology and Pathology offered in the Medical Department. Graduate.

5. Experimental Study of Veterinary Remedies. This Course is intended for Veterinary practitioners who desire to make a study of the physiological action of medicines on the various farm animals, as well as a study of therapeutic action. Graduate.

6. Investigation. Students who have suitable preparation will have an opportunity to assist in the Experiment Station work. Graduate.

Shop Work

Professor ALEXANDER; Mr. SMITH.

1. Sloyd Course for Teachers. This includes:

Card Board Work: (a) Light cardboard work adapted to children in the third grade—drawing and cutting out with scissors geometrical figures, and elementary folding. (b) Heavy cardboard work adapted to children in the fourth grade—laying out, cutting, and pasting geometrical solids and such articles of home life as appeal to children.

Knife Work: (a) Adapted to children in the fifth grade. Laying out and cutting out with a knife various objects involving two dimensions that appeal to the child's tastes. The material used is bass wood three-sixteenths of an inch thick. (b) Adapted to children in the sixth grade. The making of objects involving three dimensions, with geometrical and with free surfaces, by the free use of the knife. The material used is straight-grained pine wood.

Bench Work: (a) Adapted to children in the seventh grade. The use of simple bench tools in developing objects of interest with free and with geometric outlines. (b) Adapted to children in the eighth grade. The use of advanced bench tools in making useful articles of hard woods, chip carving, etc. (c) Adapted to first year high school pupils. Joinery, glueing, carving, and polishing objects of use and interest. Elective for students in Department of Education.

2. Wood-working and Pattern-making. This Course begins with a series of exercises in wood-working, each of which is intended to give the student familiarity with the use of some tool. This Course, as a whole, is expected to enable the industrious student easily and exactly to perform any ordinary operation familiar to the carpenter, to the joiner, and the pattern-maker. Time permitting, these exercises are followed by practice in making parts of structures, joints, small complete structures, patterns, core-boxes and other constructions in wood. Particular attention is paid to the details of pattern-making. *M. W. F.*, 10:30-12:30. Freshman.

Method of Instruction:

The teaching is oral. The instructor at the bench, anvil, or machine, fully explains the principles to be used, and all work involving new principles is executed in the presence of the whole class. Free use is made of drawings and the black-board.

When every step has been explained, the class proceeds to the execution of the work, while the instructor superintends and gives help to such as need it.

A series of 25 or 30 graduated exercises is given in each shop. All the work is disciplinary. Special trades are not taught, nor are articles manufactured for sale. The value lies in the educational value of each exercise.

These courses offer excellent opportunities to teachers who wish to prepare themselves to give instruction in Manual Training and Drawing in the high schools and district schools of the State. St. Louis, Kansas City, Moberly, Carthage and many other cities have introduced Manual Training in the High Schools and it seems probable that all the graded schools of the State will soon provide for the teaching of Shop Work and Drawing regularly.

The State University is the only institution in Missouri at which teachers can find instruction in Pedagogy and at the same time in Household Economics, Manual Training and Drawing. The shops cost, including the building and the equipment, more than \$50,000. The entire building is devoted to drawing and shop work. Six men give instruction regularly in these subjects. The work in the shops requires skill rather than strength. It can be done by women as well as by men. A number of women have taken it with eminent success.

Drawing

Mr. RODHOUSE; Mr. MACLAY.

1a. Agricultural Drawing. This work is arranged so as to be of special value to the farmer in designing buildings and machinery and in planning repairs on the farm. It embraces free hand drawing and shading, projections, geometric designs and constructions, working drawings, tracing, and blue printing. *M. Th. S., at 1:30.* Sophomore. Elective for Academic students who are candidates for the Life Certificate in the Department of Education.

Commercial Study

Miss PORTER.

1. Bookkeeping. The Course embraces instruction in the ordinary forms of business papers such as bills, receipts, notes, and drafts, and in account-study, leading up to complete sets of Single and Double Entry Books. During the second semester application of the above principles is made in a series of Business Tests. *T. Th. S., at 10:30.* Elective.

Text-Book: Packard's Method of Bookkeeping.

2. Shorthand and Typewriting. *M. T. W. Th. F. S.*, at 8:30 and at 9:30.

Text-Book: Munson's System of Shorthand, by Mrs. L. H. Packard.

3w. Bookkeeping and Farm Accounts. This course deals with the elementary principles of bookkeeping and affords practice in different forms of farm accounts, business forms, creamery and nursery accounts, etc. Short Winter Courses in Agriculture, Horticulture and Dairying.

Botany

Acting Assistant Professor THOM.

1. General Botany. The fundamental processes of life will be studied in a series of forms selected to show the orderly development of plant structures. Special attention will be paid to plants native to Missouri. Reference books: Curtis, Strasburger, Bessey. *M. W. F.*, 1:30-4. Freshman.

2a. Plant Histology and Microtechnique. Elective. See page 69.

4a. Cryptogamic Botany. Studies in algæ and fungi as an introduction to Mycology which may be continued through the year.

6. Systematic Botany and Ecology. Elective. See page 69.

7a. Grasses and Forage plants. A course in the special morphology and taxonomy of the grasses and forage plants.

Courses in Botany offered in other Departments are open as electives to Agricultural students who are prepared to pursue them to advantage.

Climatology

Mr. HACKETT.

1a. This course is intended more especially for Agricultural students, but is open to all. It consists of a study of the averages and extremes of temperature and rainfall in the United States; the normal relative humidity; relation of relative humidity to sensible temperature; normal cloudiness; average dates of last killing frost in spring and first in autumn, and other important climatic features.

For Courses in *Chemistry*, *English*, *Geology*, and *Physics*, see Academic Department, pp. 69, 73, 75, 86.

HOUSEHOLD ECONOMICS.

Miss ZABRISKIE.

This instruction stands for the recognition of the fact that house-keeping and home-making constitute a profession demanding systematic study.

1. General Course. This Course embraces one year's work and is designed for college women and others who wish to fit themselves for the management of a home on the best economic and hygienic basis.

The topics considered are:

The study of foods and food values, marketing, practical cooking of meats, fish, vegetables, batters, doughs, salads, croquettes, entrees and sauces, frozen desserts, etc., preparation and serving of luncheons and dinners, cookery for invalids, and the use of the chafing dish; home sanitation, embracing the construction of a house, water supply, heating, ventilation, cleaning, disinfection, etc.; the care of the house and its furnishings, including the cleaning of silver, brasses, walls and floors, removal of stains, etc.; fundamental principles of color, form and design as applied to house decoration and furnishing; the furnishing of homes with different amounts of money. *Three times a week.*

2. Sewing. The drafting, cutting, fitting and making of under garments and a cotton dress by the system adopted by the public schools. *Twice a week; home work.*

3. Teachers' Course. This Course is intended to meet the needs of those who realize the importance of Household Science, and, observing the demand for teachers throughout this and other States, desire to specialize in the work.

The Course comprises two years' work, and represents a detailed study of the subjects outlined below. Upon the successful completion of the course a Teacher's Certificate in Household Economics is granted.

First Year.

First Semester.		Second Semester.	
Chemistry	3	Chemistry	3
Physics	3	Physics	3
Biology	3	Biology	3
House Sanitation	1	House Sanitation	1
Cookery	2	Cookery	2
General Reading	4	General Reading	4

Second Year.

First Semester.		Second Semester.	
Physiology	3	Bacteriology and Hygiene	3
Chemistry	3	Chemistry	3
History of Education	3	History of Education	3
Cookery	2	Cookery	2
Sewing	3	Sewing	3
House Decoration	1	House Decoration	1

B. THE AGRICULTURAL EXPERIMENT STATION.

BOARD OF CONTROL:

The Curators of the University of the State of Missouri.

ADVISORY COUNCIL:

The Missouri State Board of Agriculture.

OFFICERS OF THE STATION.

THE PRESIDENT OF THE UNIVERSITY.....	
H. J. WATERS, B. S. A.....	Director
PAUL SCHWEITZER, Ph. D.....	Chemist
J. C. WHITTEN, M. S.....	Horticulturist
J. M. STEDMAN, B. S.....	Entomologist
J. W. CONNAWAY, D. V. S., M. D.....	Veterinarian
F. B. MUMFORD, M. S.....	Animal Breeding
C. H. ECKLES, B. Agr., M. S.....	Dairy Husbandry
*GEO. M. TUCKER, A. M., Ph. D.....	Agronomy
W. L. HOWARD, B. S.....	Assistant in Horticulture
-----	Assistant in Agriculture
C. THOM, A. M., Ph. D.....	Acting Assistant Professor of Botany
-----	Assistant in Chemistry
†A. E. HACKETT.....	Section Director Missouri Weather Service
JOHN SCHNABEL	Gardener
J. G. BABB, A. M.....	Secretary
R. B. PRICE.....	Treasurer
ESTELLE HICKOK	Clerk

This Station was established by the act of Congress of 1887, and by the acts of the General Assembly of Missouri accepting its provision. By one of the Board of Curators of the University it is made a division of the College of Agriculture.

The special function of the Experiment Station is to conduct original research in the various branches of Agriculture. At this time investigations are in progress relating to the maintenance of soil fertility, the renovation of worn out soil, the most efficacious rotation of crops, the adaptability of new plants to Missouri's soil and climate, the most economical methods of beef and pork production; dairying and dairy

*Appointment to take effect in September, 1902.

†In the service of the U. S. Government.

feeding, animal diseases, their origin and prevention or cure; animal and plant breeding; the propagation, selection breeding and improvement of fruits and vegetables; tests of varieties of orchard and small fruits; insect pests, fungous diseases, etc.

The Station uses such parts of the College Farm, Horticultural Grounds and the equipments of the College and University as are needed for their investigations.

The results of these investigations are published in the form of Bulletins and Annual Reports which are distributed free to all who express a desire to have them.

C. SCHOOL OF ENGINEERING.

Requirements for Admission:

For information in regard to the requirements for admission, see pages 20-9.

Tuition Charges and Fees:

For information as to tuition charges, fees, scholarships, etc., see pages 44-52.

Degrees:

The five Courses offered below lead respectively to the degrees of Bachelor of Science in Civil Engineering, Bachelor of Science in Electrical Engineering, Bachelor of Science in Mechanical Engineering, Bachelor of Science in Sanitary Engineering and Bachelor of Science in Chemical Engineering.

The degrees of Civil Engineer (C. E.), Electrical Engineer (E. E.), and Mechanical Engineer (M. E.), will be conferred on candidates who, after receiving the first degree from this University or one of equivalent standing, have spent in the same course one year (at least ten hours a week) in graduate work in the University, or two years in professional practice and in graduate work *in absentia*. The candidate must pass an examination on his graduate work and present a satisfactory thesis. The thesis subject shall be presented to the Committee on Graduate Degrees on or before Nov. 1, and the thesis shall be presented to the same Committee on or before May 1, of the given year. Those who with professional practice pursue graduate work *in absentia* must be regularly enrolled as graduate students paying the usual fees.

SCHEMES OF STUDY IN ENGINEERING.

Civil Engineering

The field covered by this Course is a very wide one, embracing topographical, railway, hydraulic, structural, municipal, and sanitary engineering and it is the aim to give a broad general training which may later serve as a foundation for the development of any of the special lines of practice included under the general term, Civil Engineering.

The Course has, therefore, been arranged with the purpose of providing thorough training in those fundamental sciences and principles upon which the practice of the civil engineer is based, and also, in so far as practicable, of giving instruction in the special subjects which underlie the several branches.

No. Course.	Subject.	Semester.		Hours.
		I.	II.	
Freshman Year.				
English 1..	Composition and Rhetoric.	3	3	I. M. W. F., 8:30; II. T. Th. S., 8:30.
Math. 1....	Trig., Solid Geometry and Anal. Geom.....	3	3	I. T. Th. S., 11:30; II. M. W. F., 11:30.
Math. 2....	Algebra	3	....	I. T. Th. S., 10:30; II. M. W. F., 10:30.
Drawing 1.	Descriptive Geometry	3	3	I. T. Th. S., 1:30-4; II. T. Th. S., 9:30-12; III. M.W.F., 1:30-4.
Shopwork 1	Woodwork and Forging...	3	3	I. M. W. F., 1:30-4; II. T. Th. S., 3:00-5:30; III. M. W. F. 4:00-6.
Chem. 2....	Gen. Inorganic Chemistry..	3	3	Lect. M. W. F. 9:30; Lab. I. M. W. F., 10:30-12; II. T. Th. S., 1:30-3; III. T. Th. S., 8:30-10.
C. E. 1....	Elementary Surveying.....	....	3	I. T. Th. S., 8:30-11; II. M. W. F., 1:30-4; III. T. Th. S., 1:30-4.
Sophomore Year.				
Math. 16...	Anal. Geom. and Cal.....	6	6	Daily, 8:30.
Drawing 2.	Machine Drawing.....	3	3	M. W. F., 1:30-4.
C. E. 2....	Higher Surveying.....	3	....	I. M. W. F., 9:30-12; II. T. Th. S., 2:30-5.
C. E. 4....	Railway Surveying. . . . .	....	3	I. M. W. F., 9:30-12; II. T. Th. S., 2:30-5.
Physics 3 ..	General Physics.....	6	6	Lect. T. Th., 1:30; Rec. T. Th., 9:30; Lab. I. T. Th., 2:30-5; II. W. S., 9:30-12.

No. Course.	Subject.	Semester.		Hours.
		I	II	
Junior Year.				
M. E. 1....	Mechanics of Engineering	5	5	M. T. W. Th. F., 8:30.
C. E. 6.	Construction.....	4	...	M. T. Th. S., 10:30.
C. E. 7.....	Municipal Engineering...	...	4	M. T. Th. S., 10:30.
C. E. 5.....	Railway Engineering....	3	...	M. W. F., 1:30-4.
C. E. 3.....	Geodetic Surveying.....	3	....	Lect. T. Th., 1:30; Field I. T., 2:30-5; II. Th. 2:30-5.
C. E. 10....	Framed Structures.....	....	4	Rec. M. W., 9:30. Draw. W. F., 1:30-4.
C. E. 13....	Masonry Structures.....	....	2	T. Th., 1:30-4.
C. E. 17 ...	Trigonometric Survey....	....	....	Ten Days.
Senior Year.				
C. E. 9.....	Hydraulics.....	3	3	M. W. F., 11:30.
M. E. 3.....	Steam Engineering.....	3	3	T. Th. S., 11:30.
C. E. 11....	Bridge Design	3	3	T. Th. S., 8:30-11.
C. E. 12....	Theory of Structures....	2	...	W. F., 8:30.
C. E. 14....	Engineering Laboratory.	1	1	W. or F., 1:30-4.
C. E. 15 ...	Materials and Construc- tion .....	....	2	M. F., 9:30.
	Elective	3	3	
		6	6	
Electives.				
E. E. 1. ...	Electrical Machinery	3	3	
Geology 3..	Engineering Geology....	3	3	
C. E. 8.....	Sanitary Engineering....	2	2	
Astron. 5b..	Practical Astronomy .....	....	5	
C. E. 15	Irrigation Engineering..	3	....

Electrical Engineering

This Course fits young men for electrical designing, manufacturing, contracting, and for the installation and management of light and power stations; in short, is a thorough, broad training for Electrical Engineers.

The first two years are devoted to preliminary training in the languages, mathematics, the sciences, and in drawing and shopwork. The technical work comes in the last two years and consists of the theory and principles of electricity and magnetism; electrical measurements; calibration of instruments; tests of all kinds; design and construction; study of special problems in the generation, transmission, and distribution of electrical energy.

Special attention is paid to alternating current phenomena.

Instruction is given by means of recitations, lectures, and laboratory work, thoroughly correlated and arranged.

The apparatus is new, from the best makers, and includes instruments for electrical measurements of precision, a storage battery conveniently

arranged for testing, an electric light plant, various types and sizes of direct and alternating current dynamos and motors, measuring instruments, etc.

No. Course.	Subject.	Semester.		Hours.
		I.	II.	
Freshman Year.				
Math. 1....	Trig., Solid Geom. and An. Geom.	3	3	I. T. Th. S., 11:30; II. M. W. F., 11:30.
Math. 2....	Advanced Algebra.....	3	....	I. T. Th. S., 10:30; II. M. W. F., 10:30.
C. E. 1....	Surveying . ....	...	3	I. T. Th. S., 8:30; II. M. W. F., 1:30; III. T. Th. S., 1:30-4:00.
English 1..	Comp. and Rhetoric.....	3	3	I. M. W. F., 8:30; II. T. Th. S., 8:30.
Chem. 2 ...	Gen. Inorganic Chem.....	3	3	{ I. and II. M. W. F., 9:30. I. M. W. F., 10:30; II. T. Th. S., 1:30.
Drawing 1.	Descriptive Geometry....	3	3	I. M. W. F., 1:30; II. T. Th. S., 9:30; III. T. Th. S., 1:30-4:00.
Shopwork 1	Woodwork and Forging..	3	3	I. T. Th. S., 3:00-5:00; II. M. W. F., 1:30-4; III. M. W. F., 4-6.
Sophomore Year.				
Math. 16...	Analytical Geometry and Calculus	6	6	Daily, 8:30.
Physics 3...	General Physics.....	6	6	Lect. T. Th., 1:30; Rec. T. Th., 9:30; T. Th., 10:30; Lab. W. S., 9:30; T. Th., 2:30; M. F., 1:30; W. S., 1:30.
Drawing 2.	El. of Machine Drawing..	3	3	I. M. W. F., 9:30; II. M. W. F., 1:30.
Shopwork 2	Machine Work.....	3	3	I. M. F., 1:30, S., 9:30; II. T. Th. S., 2:30.
Junior Year.				
M. E. 1 ..	Mechanics of Engineering	5	5	T. W. Th. F. S., 8:30.
Physics 4 ..	Electrical Measurements..	3	3	M. W. F., 1:30-4:00.
E. E. 1....	Electrical Machinery...	3	3	T. Th. S., 1:30-4:00.
E. E. 2....	Alternating Currents	4	4	T. Th. S., 9:30.
Senior Year.				
M. E. 3....	Steam Engineering.....	3	3	T. Th. S., 11:30.
E. E. 4....	Electrical Design... ..	3	3	T. Th. S., 8:30-11:00.
E. E. 3....	Alternating Currents.....	3	3	M. W. F., 1:30-4:00.
E. E. 5. ...	Electrical Transmission, Distribution	3	3	M. W. F., 11:30.
	Elective	3	3	

Mechanical Engineering

The practical and theoretical training given is intended to prepare young men for responsible positions. The practical work familiarizes them with the use of machine and hand tools; the theoretical acquaints

them with the principles underlying all machine construction. Students thus become familiar with the conditions and problems that confront all designers, and all managers of machine shops and manufacturing establishments.

In the study of prime movers special attention is given to turbines and other water motors, and to the steam engine.

In machine construction the theory of mechanism is thoroughly studied. It embraces the study of gearing, screws, cranks and levers, together with the design of machines and the materials used in their construction.

In mill-work, ventilation, heating, lighting, fire protection, arrangement of shafting, belting and machinery in manufacturing establishments, practical problems involving strength of shafting, belting, gearing, and the transmission of power are fully treated.

In steam engineering attention is given to chimneys, furnaces, boilers, and the setting of boilers with reference to proper combustion of fuel, to securing the greatest efficiency in the production of steam, and to proportioning parts for strength, durability and accessibility for repairs and cleaning. The care and management of boilers, engines, and entire steam plants is an essential part of the study.

While pursuing these studies, the student is required to make plans, working drawings and estimates.

In the laboratory special attention is given to tests of engineering materials with regard to tension, crushing, elongation, and shearing; engine and boiler trials as to efficiency; calorimeter trials as to quality of steam; valve-setting by aid of indicator. The erection, alignment and setting of engines are carefully considered.

The students in Mechanical Engineering have the use of full sets of working drawings of standard modern engines, a well selected departmental library, a 12x36 Corliss engine, a 10x10 direct connected McEwen engine, a 6x8 Weston engine, a 5 inch Rider hot air engine, complete water works plant, a refrigeration plant, a 16 horse power gasoline engine, a 10 horse power gas engine, a compound experimental steam engine, an injector testing apparatus, a 60 horse power Wheeler condenser, six boilers (one down draft, one Heine and four return tubular), a 50,000 pound Rhye testing machine, a torsion machine designed and made in the shops, an oil testing machine likewise made in the shops, together with indicators, planimeters, extensometers, steam calorimeters, tachometers, thermometers, Crosby steam gauge tester, injectors, absorption and transmission dynamometers, pyrometer, Carpenter coal calorimeter, Orsat gas analysis apparatus, engine models, pumps, tanks, etc. They also have

the use of the Electrical Engineering laboratory, in such branches of Electrical work as are required in the M. E. Course.

The Freshman and Sophomore years are identical with those of the course in Electrical Engineering, see page 160.

No. Course.	Subject.	Semester.		Hours.
		I.	II.	
<i>Junior Year.</i>				
M. E. 1....	Mechanics of Engineering	5	5	T. W. Th. F. S., 8:30.
M. E. 5 ..	Thermodynamics.	3	....	T. Th. S., 10:30.
M. E. 2....	Valve Gears.....	3	....	M. W., 10:30; F., 10:30-12:30.
M. E. 4....	Fuels and Boilers.....	....	3	M. W. F., 10:30.
M. E. 3 ..	Steam Engineering.....	....	3	T. Th. S., 10:30.
M. E. 10 ..	Kinematics	4	..	T. Th., 11:30; T. Th., 1:30-4:00.
M. E. 11...	Machine Design.....	....	4	T. Th., 11:30; T. Th., 1:30-4:00.
<i>Senior Year.</i>				
M. E. 7....	Steam Engine Design....	3	3	T. Th. S., 8:30-10:30.
M. E. 8 ..	Mechanical Laboratory...	3	3	M. W. F., 1:30-4:00.
E. E. 2....	Electrical Machinery.....	3	3	T. Th. S., 1:30-4:00.
C. E. 9....	Hydraulic Machinery....	3	....	M. W. F., 11:30.
M. E. 6 ..	Heating and Ventilation..	....	2	T. Th., 9:30.
C. E. 15 ..	Specifications and Con- tracts .....	....	1	M., 10:30.
	Elective	3	3	

Sanitary Engineering

This Course is arranged with the purpose of combining a study of the principles of sanitary science, with the fundamental training of the Course in Civil Engineering.

The Freshman and Sophomore years are identical with those of the Course in Civil Engineering (p. 158). In the two later years, the work in structural and railway engineering is reduced and more attention is given to Sanitary Engineering. Thorough courses are arranged in those sciences which immediately underlie this particular branch, Bacteriology, Chemistry and Hygiene, and special instruction is given in building and municipal sanitation, sewage disposal and water purification.

No. Course.	Subject.	Semester.		Hours.
		I.	II.	
<i>Junior Year.</i>				
M. E., 1...	Mechanics of Engineering	5	5	M. T. W. Th. F., 8:30
C. E., 6...	Construction.....	4	....	T. W. Th. F., 10:30
Chem. 12a..	Technical Chemistry...	3	....
E. E., 1...	Electrical Machinery....	3	3	T. Th. S., 1:30-4.
C. E., 7...	Municipal Engineering....	....	4	T. W. Th. F., 10:30.
C. E., 10...	Framed Structures..	....	4	Rec. M. W., 9:30; Draw. W. F., 1:30-4.
<i>Senior Year.</i>				
C. E., 9....	Hydraulics.....	3	3	M. W. F., 11:30.
M. E., 3...	Steam Engineering.	3	3	T. Th. S., 11:30.
Bact. 2....	Bacteriology.....	3	3	
Hyg. 3....	Hygiene.....	....	3	
C. E., 11...	Bridge Design.....	3	....	T. Th. S., 8:30-11.
C. E., 8....	Sanitary Engineering....	2	2	W. F., 10:30.
C. E., 14...	Engineering Laboratory..	1	1	W. or F., 1:30-4.

Chemical Engineering

In view of the development of the applications of Chemistry on a large scale such as in the manufacture of paints, dyes, soaps, starch, sugar, leather, paper, spirits, drugs, chemicals, abrasives, glue, cements, mortars, illuminants, explosives and other articles too numerous to mention, this Course is offered to furnish training in Engineering together with specialization in Chemistry. It is proposed to extend the Course making it more general on the Engineering side or to offer several parallel courses as the demands require.

FRESHMAN YEAR.

English	3	3
Solid Geom., Trig. and Analytic Geom.....	3	3
General Chemistry	3	3
Geology	3	3
Descr. Geom.....	3	3

SOPHOMORE YEAR.

Physics	6	6
An. Geom.....	3	
Calculus		3
Organ. Chemistry	3	3
Qual. Analysis	3	3
Drawing	3	3

JUNIOR YEAR.

Calculus	3	3
Mechanics	3	3
Tech. Chemistry	3	3
Electr. Measurements	3	3
Electr. Machinery	3	3

SENIOR YEAR.

Tech. Chemistry	3	3
Alt. Currents	6	6
Applied Electro-Chem		3
Hydraulics	3	3

Hydraulic Engineering

This is a graduate Course, open to those who have completed the Course in Civil or Mechanical Engineering and to others having equivalent preparation.

It is intended to furnish thorough training in the utilization of water as a source of power, water supply, drainage, irrigation, and waterways.

<i>First Semester.</i>		<i>Second Semester.</i>	
Advanced Hydraulics	3	Advanced Hydraulics	3
Pumping Machinery	3	Pumping Machinery	3
Thermodynamics	3	Rivers, Harbors, and Canals...	3
Irrigation	3	Irrigation	3

Thesis: An original investigation of some important problem and the presentation of the results in a satisfactory thesis is required.

ENGINEERING COURSES IN DETAIL.

Civil Engineering

Professor SPALDING; Mr. WILLIAMS.

C. E. 1. Elementary Surveying. Use and Adjustment of ordinary surveying instruments. Methods employed in land and topographical surveying. *Second semester, M. W. F., 1:30-4; T. Th. S., 8:30-11; T. Th. S., 1:30-4.*

C. E. 2. Higher Surveying. City, topographical mining and hydrographic surveying. *First semester, M. W. F., 9:30-12; T. Th. S., 2:30-5.*

C. E. 3. Geodetic Surveying. Elements of Geodesy with practice in use of precise instruments and reduction of triangulation. Precise level

work. Determinations of azimuth and latitude. *First semester*. Lecture. *T. Th.*, at 1:30. Field, *T. Th.*, 2:30-5.

C. E. 4. Railway Location. Theory and practice of railroad surveying, including the field location and complete estimate for a short line of railway. *Second semester*, *M. W. F.*, 9:30-12; *T. Th. S.*, 2:30-5.

C. E. 5. Railway Engineering. Track construction; railway structures; railway economics. *First semester*, *M. W. F.*, 1:30-4.

C. E. 6. Construction. Materials and methods employed in engineering construction; timber; iron and steel; highway construction; masonry construction; foundations. *First semester*, *M. T. Th. S.*, at 10:30.

C. E. 7. Municipal Engineering. Discussion of general problems of municipal public works, with more detailed study of water supply and sewerage. *Second semester*, *M. T. Th. S.*, at 10:30.

C. E. 8. Sanitary Engineering. Sewage disposal, water purification and general sanitation. *Both semesters*, *W. F.*, at 10:30.

C. E. 9. Hydraulics. First semester, hydraulic motors and the development of water power. Second semester, water distribution, reservoirs, conduits, pipe lines, water-towers and stand-pipes. *Both semesters*, *M. W. F.*, at 11:30.

C. E. 10. Framed structures. Analysis of simple trusses. Graphic statics. Design for small roof truss. *Second semester*. Recitations, *M. W.*, at 9:30. Drawing, *W. F.*, 1:30-4.

C. E. 11. Bridge Design. Design for plate girder bridge and steel railway bridge of short span, with working drawings and estimates. *Both semesters*, *T. Th. S.*, 8:30-11.

C. E. 12. Theory of structures. Swing bridges, arches, suspension and cantilever bridges, deflection of trusses. *First semester*, *W. F.*, at 8:30.

C. E. 13. Masonry structures. Theory and stereotomy of masonry structures with design and estimate for masonry or concrete arch. *Second semester*, *T. Th.*, 1:30-4.

C. E. 14. Engineering Laboratory. Testing materials, hydraulic laboratory. *Both semesters*, *W.*, at 1:30; *F.*, at 1:30.

C. E. 15. Irrigation Engineering. *First semester*. Three times a week.

C. E. 16. Materials and Construction. Engineering contracts and specifications. Testing and inspection of materials. Methods used in construction. *Second semester*, *M. F.*, at 9:30.

C. E. 17. Trigonometric Survey. Survey of a section of country in vicinity of Columbia, including measurement of base, triangulation, azimuth determination, precise leveling, and topography. *Ten days at end of second semester*.

Electrical Engineering

Professor SHAW.

E. E. 1. Electrical Machinery. Theory, construction, and operation of continuous current generators, motors, measuring instruments and accessories. Laboratory: characteristics, efficiencies, heating tests, diseases and remedies. *T. Th. S.*, 1:30-4.

E. E. 2. Alternating Currents. Alternating current phenomena. Theory of current flow. Single and multiphase generators, motors, transformers, and instruments. *T. Th. S.*, at 9:30.

E. E. 3. Alternating Currents. A continuation of Course 2 with laboratory tests as to operation, regulation, efficiency, etc. *M. W. F.*, 1:30-4.

E. E. 4. Electrical Design. The design of electrical apparatus, including generators, motors, rheostats, transformers, and switchboards. *T. Th. S.*, 8:30-11.

E. E. 5. Electrical Transmission and Distribution. Study of details of lighting, power, and transmission systems, including street railways, with regard to estimates and specifications, selection and arrangement of machinery, installation, testing, and management. *M. W. F.*, at 11:30.

E. E. 6. Telephony and Telegraphy. Instruments and systems. Lines and their properties with special reference to effects of inductance and capacity. Wireless telegraphy. Hours to be arranged.

E. E. 7. Advanced Alternating Currents. With special reference to Long Distance Transmission. Hours to be arranged.

These Courses are intended to be taken in numerical order. They are all continuous throughout the year.

1 and 2 are required of Juniors in Electrical Engineering; 3, 4, and 5 of Seniors.

2 is required of Seniors in Mechanical Engineering and of Juniors in Sanitary Engineering.

6 and 7 are elective for such Engineering students as are prepared for them.

Mechanical Engineering

Assistant Professor ALEXANDER.

M. E. 1. Mechanics of Engineering. Statics, dynamics, strength of materials, hydrostatics and hydrodynamics. *T. W. Th. F. S.*, at 8:30.

M. E. 2. Valve Gears. Valves, valve diagrams, link motions and methods of laying out on drawing board. *T. Th.*, at 10:30; *Th.*, 1:30-4:00.

M. E. 3. Steam Engineering. Types of engines. Computation of sizes of different parts of the steam engine. Theoretical study of fly wheel, governor and reciprocating parts. Indicator practice and laboratory instruments. *Second semester, T. Th. S., at 10:30.*

M. E. 4. Fuels and Boilers. Study of combustion and fuels. Design, care and operation of boilers and boiler plants. *Second semester, M. W. F., at 10:30.*

M. E. 5. Thermodynamics. Application of thermodynamics to steam and other heat engines, compressed air and refrigeration. *First semester, M. W. F., at 10:30.*

M. E. 6. Steam Heating and Ventilation. *Second semester, T. Th., at 9:30.*

M. E. 7. Steam Engine Design. *T. Th. S., 8:30-10:30.*

M. E. 8. Mechanical Laboratory. Testing materials. Calibration of instruments. Valve setting and indicator practice. Testing boilers, steam engines, gas and gasoline engines, hot air engines, pumping machinery, etc. *M. W. F., 1:30-4.*

M. E. 9. Pumps and Pumping Machinery. Requirements: Courses M. E. 1, M. E. 3, and C. E. 9.

M. E. 10. Kinematics of Machinery. The principles of mechanisms, belting, toothed gears, cams and linkage. *First semester, T. Th., at 11:30; T. Th., 1:30-4.*

M. E. 11. Machine Design. Graphic statics of mechanism. Methods of manufacture, physical and chemical properties of the materials of construction. Design of machine parts involving calculation as in bearings, pulleys, gearing and the various power transmission devices. *Second semester, T. Th., at 11:30; T. Th., 1:30-4.*

M. E. 12. Short Course in Steam Engineering. Steam engines, gas and gasoline engines, boilers, locomotives, heating with steam, valve gears and laboratory instruments. *First semester, M. W. F., at 11:30.*

Course 1 is for all Engineering students. Course 12 and one semester of Course 8, are for Civil and Electrical Engineering students.

Courses 2, 3, 4, 5, 6, 7, 8, 10 and 11 are required of Mechanical Engineering students.

Course 9 is elective.

Courses 10 and 11 may be elected by Civil or Electrical Engineering students.

Shop Work

Assistant Professor ALEXANDER; Mr. SMITH.

The Courses offered in shop work are intended to familiarize the student with metal and wood working tools and machinery. Each course

begins with a series of graded exercises, of such a nature that upon completion the average student will have a good practical knowledge of work in that line.

The equipment for wood working consists of 25 speed lathes for wood-turning, 25 sets of bench tools and 96 sets of edged tools, complete.

The blacksmith-shop is equipped with 25 forges, 25 anvils, and 25 sets of forge tools.

The blast for the forges is supplied by a power blower. A 48" exhaust fan keeps the shops cool and free from smoke and gases.

The machine-shop is equipped with four screw-cutting engine lathes 14" swing, 8' bed; one screw-cutting engine lathe 18" swing, 8' bed; one polishing lathe, 12" swing, 6' bed; one 26x26 Gray planer; two 16" crank-shapers; one pipe-cutting and threading machine; one wet and dry emery grinder and surfacer; one 24" drill-press; one cold cut-off saw; and with tool-room and ample bench outfit.

Shop 1. Wood-working, pattern making and forging. The Course includes joinery, general carpentry, turning in hard and soft wood, and pattern making. The last half of the second semester work in forging, tool making and tempering is taken up.

Shop 2. Machine shop. Chipping, filing, facing and finishing in steel, cast and wrought iron, care and use of lathes, shapers, planers, milling machine, etc. Practice is given in the construction of parts of machines and finally in the building of a complete machine.

Course 1 is required of students in Civil Engineering.

Courses 1 and 2 are required of Mechanical and Electrical Engineering students.

Drawing

Mr. RODHOUSE; Mr. CRAIG; Mr. MACLAY.

1. Descriptive Geometry. Orthographic projections, problems relating to points, lines, and planes, preceded by a short course in elementary mechanical drawing and plain free-hand lettering. Representation of surfaces, their tangencies, intersections and developments. Shades and shadows. Isometric, cabinet, and prospective views. Sec. I, *T. Th. S.*, 9:30-12; Sec. II, *M. W. F.*, 1:30-4. Freshman.

2. Drafting. Elements of machine drawing, tracing, blue printing, brush shading, tinting, and topographic sketching. Patent office drawings. Measured work from machine parts and practical drafting-room methods receive special attention. *M. W. F.*, 9:30-12. Sophomore.

VIII. THE SCHOOL OF MINES AND METALLURGY

A Department of the University of Missouri.
(At Rolla, Missouri.)

EXECUTIVE COMMITTEE.

JOHN D. VINCIL, Chairman.....	St. Louis
D. A. McMILLAN.....	Mexico
B. G. THURMAN.....	Lamar
CHAS. L. WOODS, Secretary.	HENRY WOOD, Treasurer.

FACULTY.

RICHARD H. JESSE, LL. D.,
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GEORGE E. LADD, Ph. D.,
Director and Professor of Geology and Mining.

GEORGE R. DEAN, C. E.,
Professor of Mathematics.

AUSTIN LEE McRAE, S. D.,
Professor of Physics.

*VICTOR HUGO GOTTSCHALK, M. S.,
Professor of Chemistry.

†PETER FIREMAN, Ph. D.,
Acting Professor of Chemistry.

ELMER JAMES McCAUSTLAND, M. C. E.,
Professor of Civil Engineering.

HERMAN OTTO SCHULZE, E. M.,
Instructor in Metallurgy.

PAUL J. WILKINS, B. S.,
Instructor in Modern Languages.

*Absent during session of 1901-2.

†For the session of 1901-2.

JOHN B. SCOTT,

Instructor in English, and Secretary.

JAMES CLARK DRAPER, B. S.,

Instructor in Shopwork and Drawing.

A. DYKE WILSON,

Instructor in Chemistry.

JOSEPH CLARK,

Assistant in Chemical Laboratory.

GEORGE WALTER HARRIS,

Assistant in Chemical Laboratory.

FRED RAGLAND COWLES.

Assistant in Mathematics.

CORNELIUS MARK DAILY,

Assistant in Physical Laboratory.

LAWRENCE MAY,

Assistant in Geological and Mineralogical Laboratory

LEON ELLIS GARRETT,

Assistant in Mathematics.

HARRY NOEL REX,

Assistant in Surveying.

ROYAL SYLVESTER WEBSTER,

Assistant in Surveying.

CYRUS EDWARD MINOR,

Assistant in Surveying.

B. SCHOOL OF MINES AND MATALLURGY AT ROLLA.

Organization:

In 1870, the General Assembly, in accepting the donation by the general government of lands for educational purposes, established an Agricultural College and School of Mines and Metallurgy, "the leading object of these Colleges" being "to teach such branches as are related to agriculture and mechanic arts and mining, including military tactics, and without excluding other scientific and classical studies, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life." (R. S. 1889.) The Statutes fix the status of the School of Mines as a College of the State University. Its affairs are under the immediate supervision of the Executive Com-

mittee, consisting of three members of the Board of Curators of the University.

Location:

The School is located at Rolla, the county seat of Phelps county, on the St. Louis and San Francisco railroad, about midway between St. Louis and Springfield. Rolla has an altitude of 1140 feet above sea level and enjoys an agreeable and notably healthful climate. It is midway between the mining districts of Southeast and Southwest Missouri.

Admission:

From Approved Schools.—Graduates of Approved Schools (see pages 38-9) who bring certificates signed by the Superintendent or Principal of the school showing that they, have completed twelve (12) units in the subjects that may be offered for admission (see page 31), and that three (3) of these units are in English, two (2) in Algebra, and one (1) in Plane Geometry, will be admitted without examination.

By Examination.—Students not admitted by certificate from Approved Schools must pass examinations upon twelve (12) units, three (3) of which must be in English, two (2) in Algebra, and one (1) in Plane Geometry. For subjects that may be offered, see page 31.

Buildings and Equipment:

The buildings of the School of Mines are situated in the most elevated part of the town of Rolla. They are nearly all substantial brick structures well ventilated and lighted and heated by steam. There are eight in all: Mining and Metallurgical Building, Chemical Laboratory, (recently enlarged), Museum and Geological Survey Building, Workshop and Dynamo Laboratory, temporary building for Gymnasium, Dormitory, Mechanical Building, and Engineering Building.

Mining and Metallurgical Building.—The special building for the department of Mining and Metallurgy, finished in 1895, is equipped with the necessary appliances for a practical course in ore concentration, roasting and reduction.

The building consists of two distinct portions, one containing a chemical and a mineralogical laboratory, lecture room, reference library, draughting room, petrographical laboratory, blue print room, etc.; the other comprises a large mill room, an engine room, and a boiler room. The mill room is equipped with first-class modern machinery, of standard sizes, for crushing and concentration of ores, the plant containing a Dodge rock breaker, Cornish rolls, stamp battery with automatic feeder, Calumet hydraulic classifier, inlet discharge separator, Hartz jig, spitzkasten, Parsons-Rittinger percussion tables, Frue vanner, grinding

and amalgamating pan and settler, with settling boxes. In addition to these, working models of different types of concentrators have been made by students of the School of Mines and contributed to its outfit. The reduction plant consists of a reverberatory roasting furnace, and a 20-inch water-jacket cupola furnace, with Root blower, for lead and copper ores. There are also assay and cupellation furnaces, and before the beginning of next term it is hoped that a zinc distillation furnace will have been erected. A barrel chlorination outfit has also been added, and the Ingersoll-Sergeant Drill Co. has presented the school with one of its steam and compressed air drills, with which the classes in mining are given experience in drilling.

The Metallurgical Department is also equipped with clay testing apparatus, including the latest type of German-made special fire-clay testing furnaces and accessories and also the Keiser and Schmidt modifications of Le Chatelier's thermo-electric pyrometer for the measurement of high temperature.

The power for the above plant is derived from a 50 H. P. automatic engine, taking steam from two 35 H. P. tubular boilers.

By means of this equipment students receive practical instruction in the crushing and concentration of various ores, and in the metallurgical treatment of ores of lead, zinc, copper, gold and silver.

The Geological and Mineralogical equipment is also in this building, but will be removed to one of the new buildings during the next school year. This equipment includes a representative collection of minerals, rocks, and fossils for class use, and a large collection of cabinet specimens of minerals and ores, and of materials illustrating metallurgical processes. There is also a collection of 3500 specimens representing the mineral wealth of Missouri, consisting of ores of lead, zinc, iron and copper, coal, clays of many sorts, and building stones.

This department has also a very fine equipment for the study of crystallography, consisting of a large collection of wood and glass models, microscopes, rocks and mineral slides and the complete Fuess projection apparatus for illustrations of the optical properties of crystals.

A rock section machine and instruments for geological surveys are included in the equipment of this department.

Chemical Laboratory.—The Chemical Laboratory has recently been enlarged. It is a two story, substantial, well-lighted brick building, with large wings devoted entirely to the work of the Chemical department. It contains general qualitative, quantitative, organic, and assay laboratories, lecture room, preparation room, balance rooms, stock rooms, private laboratories, offices, and rooms for gas and water analysis, electrolysis, photography, etc.

Museum and Geological Survey Building.—This building contains for the present year the library, laboratories, and lecture and museum rooms. The departments of Physics and Civil Engineering are at present housed in this building. They have an excellent equipment in the way of laboratory supplies and field instruments and each year is materially adding to their equipment.

Workshop and Dynamo Laboratory.—This is a large wooden structure necessitated by the rapid growth of the wood-working department and the need of more room for students engaged in electrical laboratory work. It is well lighted and is well equipped with carpenter benches, tools, wood and iron lathes, etc. The machinery is run either by electricity from a dynamo in the engine room of the Mining Building, or by a 15 H. P. Otto gasoline engine which is in this building.

The Dynamo Laboratory contains as a part of its equipment one 75 light United States dynamo, one 5 horse power Westinghouse motor, one 5 horse power C. & C. motor, one alternator, one 3-phase generator, single and polyphase transformers, with necessary testing apparatus.

Temporary Building for Gymnasium.—Owing to the large increase in the number of students attending the school in the fall of 1899, it became necessary to utilize the old drawingroom and the lecture room in the Chemical Building for laboratory purposes and a new temporary building was erected for drawing and lecture purposes. Now that the Chemical laboratory has been enlarged and ample facilities for drawing provided in the new buildings this building in the immediate future will be used for a gymnasium.

Dormitory.—This is a three-story brick building formerly used as a dormitory but at present occupied by the State Geological Survey.

Mechanical Building.—This is a two story brick building 150 feet by 60 feet specially designed for mechanical work. The second floor will be used for freshman drawing, carpentry work and wood turning. The first floor will contain a forge room, a power room and iron working room, and dynamo and hydraulic laboratories.

Engineering Building.—This building, designed by Van Brunt and Howe of Kansas City and Boston, will be a handsome structure 140x85 feet, and four stories in height, built of pressed brick, trimmed with Carthage stone. It will be erected in the summer of 1902.

Ample facilities will be afforded in this building for administration and the departments of Physics, Geology and Mineralogy, and Civil Engineering.

The Physical laboratory will be on the basement floor. In addition to the general laboratory there will be a photometer room, a constant temperature room, a storage battery room, an electrical testing room,

and a laboratory for special work. This floor will also contain a blower and fan room for heating and ventilating the building, a toilet and shower-bath room and a room for storing engineering instruments. The first floor will contain the Physics lecture room, Physics apparatus room, and study, two general lecture rooms, two rooms for mineralogical collections, and cloak and toilet rooms. The second floor will contain administration offices, faculty room, lecture room, Geological, Petrographical and Mineralogical laboratories, photographic room, private laboratory and toilet rooms.

The third floor will contain a lecture room, two drawing rooms, blue print room, office, department library, toilet, and other rooms.

Library.—The Library contains about 4,000 volumes. It is well provided with scientific and technical works designed to afford the student an opportunity of supplementing his class-work by collateral reading. There is also a respectable collection of works of general literature. On its reading-tables the leading scientific periodicals and others of general or literary interest are accessible. The Library is open daily from 8 a. m. to 4 p. m.

Courses and Degrees;

The School of Mines offers four full Courses leading to the degree of Bachelor of Science, as follows: I. Mining Engineering, II. Civil Engineering, III. Chemistry and Metallurgy, IV. General Science; besides several special shorter courses.

The further degree of Engineer of Mines (E. M.), Civil Engineer (C. E.), Metallurgical Engineer (Met. E.), or Master of Science (M. S.), will be conferred on candidates who, after receiving the first degree from this University or one of equivalent standing, have spent in the same course one year (at least ten hours a week) in graduate work in the University, or two years in professional practice and in graduate work *in absentia*. The candidate must pass an examination on his graduate work and present a satisfactory thesis.

Expenses:

Laboratory Fees.—The Board of Curators at a meeting held in December, 1898, voted to make tuition free, and to abolish the entrance fees which had hitherto been charged. The fixed charges remaining are: a library fee of \$5 per year, payable upon entrance: a laboratory fee to cover the cost of gas and supplies, amounting to \$10, for the course in General Chemistry; a laboratory fee of \$15 to cover the cost of general supplies, gas, etc., for the course in Qualitative Analysis; a fee for seniors and juniors, taking Chemical laboratory work, of \$3.50; a fee for the course in Shop Work, to cover the cost of supplies, of

\$5; a general fee, to cover the cost of supplies, for students taking Assaying, of \$25; a fee, for students taking Mineralogy, to cover the cost of supplies, of \$8; and a fee of \$5 for students in senior Metallurgy.

The above charges are made on the basis of the actual average cost per student for supplies in the respective courses, at wholesale rates.

Contingent Deposits.—Deposits, to cover the cost of extra supplies, damage to apparatus, etc., are required of the different classmen, as follows: Freshmen, \$10, Sophomores, Juniors and Seniors, \$15. These deposits must be renewed if at any time exhausted, and at the end of the school year whatever sum may remain to the credit of the depositor is returned to him.

No distinction, in admission or charges, is made between residents of this State and those of any other State or country.

Term Reports:

Reports are sent to the parents or guardians of each student, at the close of each term, showing the student's grade in scholarship, and giving such other information in regard to his progress, attendance, etc., as may be thought to be of interest. The attention of parents and guardians is particularly called to these reports.

COURSE I. MINING ENGINEERING.

FRESHMAN YEAR.

First Term.

Trigonometry, lectures and recitations.....	2 hours
Higher Algebra, lecture and recitations.....	4 hours
General Chemistry, lectures and recitations.....	4 hours
English, lectures and recitations.....	3 hours
Chemistry, laboratory work.....	1 afternoon
Drawing	2 afternoons
Shop practice	2 afternoons.

Second Term.

General Chemistry, lectures and recitations.....	4 hours
Trigonometry, lectures and recitations.....	2 hours
Solid Geometry, lectures and recitations.....	4 hours
English, lectures and recitations.....	3 hours
Chemistry, laboratory work.....	1 afternoon
Drawing	2 afternoons
Shop practice.....	2 afternoons

Third Term.

General Chemistry, lectures and recitations.....	4 hours
Analytic Geometry, lectures and recitations.....	5 hours
Physics, lectures and recitations.....	5 hours
English, lectures and recitations.....	2 hours
Chemistry, laboratory work, Qualitative Analysis.....	2 afternoons
Drawing	1 afternoon
Shop practice.....	2 afternoons

SOPHOMORE YEAR.

First Term.

Calculus, lectures and recitations.....	5 hours
Applied Chemistry, lectures	3 hours
Surveying, lectures	3 hours
French, German or Spanish, lectures.....	5 hours
Chemistry, laboratory	2 afternoons
Field Practice in Surveying	3 afternoons

Second Term.

Descriptive Geometry, lectures and recitations.....	3 hours
Calculus, lectures and recitations.....	5 hours
Applied Chemistry, lectures and recitations.....	3 hours
French, German or Spanish, lectures	5 hours
Chemistry, laboratory work.....	2 afternoons
Drawing	3 afternoons

Third Term.

Descriptive Geometry, lectures and recitations.....	3 hours
Calculus, lectures and recitations.....	5 hours
Physics, lectures and recitations.....	5 hours
French, German or Spanish, recitations.....	5 hours
Chemistry, elective work.....	2 afternoons
Surveying, field practice.....	1 afternoon
Physics, laboratory	2 afternoons

JUNIOR YEAR.

First Term.

Mechanics, lectures and recitations.....	5 hours
Geology, lectures	3 hours
Ore-dressing, lectures	3 hours

Thermodynamics, lectures and recitations.....	5 hours
Mineralogy, laboratory work.....	2 afternoons
Assaying, laboratory work	2 afternoons
Steam Laboratory	1 afternoon
Ore-Dressing, laboratory work	Saturdays

Second Term.

Physics, lectures and recitations.....	5 hours
Geology, lectures	3 hours
Mechanics of Materials, lectures and recitations	4 hours
Metallurgy, lectures and recitations.....	5 hours
Physics, laboratory work	2 afternoons
Quantitative Analysis, Drawing or Electrical Measurements—	
laboratory work	2 afternoons
Mineralogy, laboratory work	1 afternoon

Third Term.

Masonry, lectures and recitations	2 hours
Geology, lectures	3 hours
Dynamo Machinery, lectures and recitations.....	3 hours
Metallurgy, lectures and recitations.....	5 hours
Lines of Communication, lectures and recitations.....	3 hours
Physics, laboratory work	2 afternoons
Quantitative Analysis, Drawing or Motor Testing—	
laboratory work	3 afternoons
Metallurgy, laboratory work	Saturdays

SENIOR YEAR.

First Term.

Economic Geology, lectures	2 hours
Alternating Current Machinery, lectures and recitations...	5 hours
Metallurgy, lectures and recitations.....	5 hours
Framed Structures, lectures and recitations	5 hours
Dynamo Laboratory	2 afternoons
Metallurgical Designing	2 afternoons
Engineering Laboratory	1 afternoon
Metallurgy, laboratory work	Saturdays

Second Term.

Economic Geology, lectures	2 hours
Metallurgy, lectures and recitations.....	5 hours

Hydraulics, lectures and recitations.....	5 hours
Electrical Transmission, lectures and recitations.....	3 hours
Metallurgical Designing	3 afternoons
Electrical Problems and Designing	1 afternoon
Hydraulics, Problems and Designing	1 afternoon
Metallurgy, laboratory	Saturdays

Third Term.

Mining, lectures	5 hours
Contracts and Specifications	2 hours
Compressed Air and Power Transmission.....	2 hours
Thesis	5 afternoons

COURSE II. CIVIL ENGINEERING.

FRESHMAN YEAR.

Same as in Mining Engineering.

SOPHOMORE YEAR.

Same as in Mining Engineering except that in the third term Civil Engineers take Chemical Laboratory work one afternoon and Field Practice two afternoons instead of Chemical Laboratory two afternoons and Field Practice one afternoon.

JUNIOR YEAR.

First Term.

Mechanics, lectures and recitations.....	5 hours
Geology, lectures and recitations.....	3 hours
Thermodynamics, lectures and recitations.....	5 hours
Astronomy, lectures and recitations.....	3 hours
Physics, laboratory work	1 afternoon
Drawing and Field Practice	4 afternoons

Second Term.

Physics, lectures and recitations	5 hours
Metallurgy, lectures and recitations	5 hours
Geology, lectures	3 hours
Mechanics of Materials	4 hours
Physics, laboratory work	2 afternoons
Drawing	3 afternoons

Third Term.

Masonry, lectures and recitations	2 hours
Dynamo Machinery, lectures and recitations.....	3 hours
Lines of Communication, lectures and recitations	5 hours
Geology, lectures and recitations	3 hours
Physics, laboratory work	2 afternoons
Drawing	3 afternoons

SENIOR YEAR.

First Term.

Structural Design, lectures and recitations	4 hours
Alternating Current Machinery	5 hours
Framed Structures	5 hours
Metallurgy of Steel (special course).....	3 hours
Dynamo Laboratory	2 afternoons
Engineering Laboratory	1 afternoon
Drawing and Designing	2 afternoons

Second Term.

Hydraulics, lectures and recitations	5 hours
Electrical Transmission	3 hours
Bridge Stresses, lectures and recitations.....	4 hours
Electrical Problems and Designing	1 afternoon
Hydraulic Problems and Designing	1 afternoon
Drawing and Designing	3 afternoons

Third Term.

Bridge Designing	4 hours
Sanitary Engineering, lectures and recitations	2 hours
Compressed Air Power Transmission	2 hours
Contracts and Specifications	2 hours
Thesis	5 afternoons

COURSE III. CHEMISTRY AND METALLURGY.

FRESHMAN YEAR.

Same as Mining Engineering except that German is obligatory.

SOPHOMORE YEAR.

Class room work same as in Mining Engineering, except that during the first term Applied Chemistry is substituted for surveying. Laboratory work.

First Term.

Chemistry	3 afternoons
Drawing	2 afternoons

Third Term.

Chemistry	3 afternoons
Physics	2 afternoons

JUNIOR YEAR.

First Term.

Mechanics, lectures and recitations	5 hours
Geology, lectures and recitations.....	3 hours
Ore Dressing, lectures and recitations	3 hours
Mineralogy, laboratory work	2 afternoons
Chemistry, laboratory work	3 afternoons
Ore Dressing	Saturdays

Second Term.

Metallurgy, lectures and recitations.....	5 hours
Physics, lectures and recitations	5 hours
Geology, lectures and recitations.....	3 hours
*A. Mechanics of Materials.....	4 hours
*B. Theoretical Chemistry	5 hours
Physics, laboratory work	2 afternoons
Chemistry, laboratory work	2 afternoons
Mineralogy, laboratory work	1 afternoon

Third Term.

A. Masonry, lectures and recitations	2 hours
Geology, lectures	3 hours
Physical Chemistry	5 hours
Metallurgy, lectures and recitations.....	5 hours
Chemistry, laboratory work	4 afternoons
Metallurgy, laboratory work	Saturdays

SENIOR YEAR.

First Term.

A. Metallurgy of Steel	3 hours
Metallurgy, lectures and recitations	5 hours

*Students specializing in Metallurgy take course A, and those specializing in Chemistry take course B.

A. Alternating Currents, lectures and recitations.....	5 hours
B. Organic Chemistry, lectures and recitations.....	4 hours
B. Elective	5 hours
Metallurgy, laboratory work	Saturdays
Chemistry, laboratory work	3 afternoons
Designing	2 afternoons

Second Term.

Metallurgy, lectures and recitations.....	5 hours
Electro-Metallurgy, lectures and recitations	3 hours
B. Organic Chemistry, lectures and recitations.....	4 hours
A. Hydraulics	5 hours
Electro-Metallurgy, laboratory work	2- afternoons
A. Designing	3 afternoons
B. Chemistry, laboratory work	3 afternoons
Metallurgy, laboratory work	Saturdays

Third Term.

B. Organic Chemistry, lectures and recitations.....	4 hours
A. Metallurgical Problems	5 hours
Elective	4 hours
Thesis	5 afternoons

ACADEMIC DEPARTMENT.

With Electives from the Course in Engineering.

*COURSE IV. GENERAL SCIENCE.**FRESHMAN YEAR.**First Term.*

English	3 hours
Algebra	5 hours
Geometry	5 hours
Chemistry	4 hours
Chemistry, laboratory work	1 afternoon
Drawing	2 afternoons

Second Term.

English	3 hours
Algebra	5 hours

Geometry	5 hours
General Chemistry	4 hours
Chemistry, laboratory work	1 afternoon
Drawing	2 afternoons

Third Term.

English	2 hours
Algebra	5 hours
Physics	5 hours
General Chemistry	4 hours
Chemistry, laboratory work	2 afternoons
Drawing	2 afternoons

SOPHOMORE YEAR.

Trigonometry	2 hours
Higher Algebra	3 hours
English	3 hours
French, German or Spanish	5 hours
Applied Chemistry	4 hours
Chemistry, laboratory work	2 afternoons
Elective	2 afternoons

Second Term.

Applied Chemistry	3 hours
Trigonometry	2 hours
French, German or Spanish	5 hours
Elective	5 hours
English	5 hours
Elective, drawing or laboratory work.....	5 afternoons

Third Term.

Analytics	5 hours
Physics	5 hours
French, German or Spanish	5 hours
English	2 hours
Physics, laboratory work	2 afternoons
Elective, drawing or laboratory work	3 afternoons

JUNIOR YEAR.

First Term.

Elective	13 hours
Elective	5 afternoons

Electives :

Surveying	3 hours
French or German	2 hours
Geology	3 hours
Mineralogy	2 hours
Astronomy	3 hours
Biology	3 hours
Physical Geography	5 hours
English History	5 hours
Masonry Construction	3 hours
Mathematics	5 hours
Mechanics	5 hours
Ore Dressing	3 hours

Second Term.

Elective	13 hours
Elective	5 afternoons

Electives :

Descriptive Geometry	3 hours
Dynamo Machinery	3 hours
Physics	5 hours
Theoretical Chemistry	5 hours
Biology	3 hours
Mineralogy	4 hours
Geology	3 hours
Physical Geography	5 hours
Mathematics	5 hours

Third Term.

Elective	13 hours
Elective	5 hours

Electives :

Metallurgy	5 hours
Alternating Current Machinery	5 hours
Descriptive Geometry	3 hours
Theoretical Chemistry	5 hours
Geology	3 hours
Physical Geography	5 hours
Mathematics	5 hours

SENIOR YEAR.

All Elective.

Selection of studies subject to approval of Professor.

Electives after Sophomore year along one of the two lines, Physics and Mathematics, or Chemistry and Geology. Twenty-one hours recitation or sixteen hours recitation and five hours laboratory work constitute a course.

SPECIAL COURSE IN CHEMISTRY AND ASSAYING.

First Term.

English	3 hours
Algebra	5 hours
Chemistry	4 hours
Chemistry, laboratory work	3 afternoons
Elective	2 afternoons

Second Term.

English	3 hours
Algebra	5 hours
General Chemistry	4 hours
Chemistry, laboratory work	3 afternoons
Elective	2 afternoons

Third Term.

General Chemistry	4 hours
Physics	5 hours
English	2 hours
Algebra	5 hours
Chemistry	3 afternoons
Elective	2 afternoons

SECOND YEAR.

First Term.

Applied Chemistry	3 hours
Mineralogy	4 hours
Geology	3 hours
Ore Dressing	3 hours
Chemistry and Assaying, laboratory work.....	4 afternoons

Second Term.

Applied Chemistry	3 hours
Mineralogy	4 hours
Geology	3 hours
Elective	2 hours
Chemistry and Assaying, laboratory work.....	5 hours

Third Term.

Geology	3 hours
Elective	8 hours
Chemistry and Assaying, laboratory work	4 afternoons

SPECIAL COURSE IN MINING.

FIRST YEAR.

First Term.

Trigonometry	2 hours
Algebra	5 hours
Geometry	5 hours
English	3 hours
General Chemistry	4 hours
Chemistry, laboratory work	1 afternoon
Drawing	2 afternoons
Shop Practice	2 afternoons

Second Term.

General Chemistry	4 hours
Algebra	5 hours
Solid Geometry	5 hours
Trigonometry	2 hours
Chemistry, laboratory work	1 afternoon
Drawing	2 afternoons
Shop practice	2 afternoons

Third Term.

General Chemistry	4 hours
Algebra	5 hours
English or Physics	5 hours
Chemistry, laboratory work	2 afternoons
Drawing	1 afternoon
Shop Practice	2 afternoons

SECOND YEAR.

First Term.

Ore Dressing	3 hours
Surveying	3 hours
Applied Chemistry	3 hours
Geology	3 hours
Field Practice	3 afternoons
Mineralogy, laboratory work.....	1 afternoon
Ore Dressing	Saturdays

Second Term.

Applied Chemistry	3 hours
Geology	3 hours
Mineralogy	6 hours
Chemistry, laboratory work and assaying.....	5 afternoons

Third Term.

Geology	3 hours
Mining	4 hours
Metallurgy, elective	5 hours
Metallurgy, laboratory work	Saturdays
Elective	5 afternoons

SPECIAL COURSE IN ELECTRICITY.

FIRST YEAR.

First Term.

Higher Algebra	5 hours
Trigonometry	2 hours
English	3 hours
General Chemistry	1 afternoon
Chemistry, laboratory work	2 afternoons
Drawing	2 afternoons
Shop work	2 afternoons

Second Term.

General Chemistry	4 hours
English	3 hours
Solid Geometry	3 hours

Trigonometry	2 hours
Chemistry, laboratory work	1 afternoon
Drawing	2 afternoons
Shop Work	2 afternoons

Third Term.

General Chemistry	4 hours
English	2 hours
Physics	5 hours
Analytic Geometry	5 hours
Physics, laboratory work	2 afternoons
Chemistry, laboratory work	1 afternoon
Drawing or Shop Work	2 afternoons

SECOND YEAR.

First Term.

Electricity and Magnetism	3 hours
Calculus	5 hours
Elective	4 hours
Physical Laboratory	3 afternoons
Elective	2 afternoons

Second Term.

Physics	5 hours
Calculus	5 hours
Elective	4 hours
Physical Laboratory	3 afternoons
Elective Laboratory	2 afternoons

Third Term.

Calculus	5 hours
Physics	5 hours
Dynamo Machinery	3 hours
Dynamo Laboratory	3 afternoons
Drawing	2 afternoons

SPECIAL COURSE IN SURVEYING.

First Term.

Trigonometry	2 hours
Algebra	5 hours

Geometry	3 hours
Drawing	2 afternoons
Elective	2 afternoons

Second Term.

English	3 hours
Trigonometry	2 hours
Algebra	5 hours
Geometry	5 hours
Drawing	2 afternoons
Elective	3 afternoons

Third Term.

Algebra	5 hours
English	2 hours
Elective	5 hours
Drawing	2 afternoons
Elective	3 afternoons

SECOND YEAR.

Surveying	3 hours
Elective	6 hours
Field Practice	3 afternoons
Drawing	2 afternoons

For further information and special catalogues of the School address,

GEO. E. LADD, Ph. D., Director,

Rolla, Mo.

LIST OF STUDENTS

Graduate Department.

Name.	Course.	Postoffice.	County.
Ankeney, Mrs. Lucy Gentry, A. D. P., B. P.	Acad.	Columbia.....	Boone.
Barnett, Mary Jesse, A. B., A. M.	Acad.	Columbia.....	Boone.
Becker, Amanda Fredericka, B. S.	Acad.	St. Louis City.	
Blackwell, Paul Alex., B. S. in C. E.	Eng.	Canonsburg, <i>Pa.</i>	
Bristol, Emerson, A. B.	Acad.	Choteau, <i>Mont.</i>	
Conway, Julia Carlton, Ph. B.	Acad.	Columbia.....	Boone.
Conley, Dudley Steele, B. L.	Acad.	Columbia.....	Boone.
Daniels, Francis Potter, A. B.	Acad.	Alte, <i>Mich.</i>	
Elwang, William Wilson, Ph. B.	Acad.	Columbia.....	Boone.
Evers, Helene Margaret, A. B.	Acad.	St. Louis City.	
Gary, Lester Bennett, Ph. B.	Acad.	Austinburg, <i>Ohio.</i>	
Gerig, Rosalie, A. B.	Acad.	Columbia.....	Boone.
Green, Talitha Jennie, B. S.	Acad.	Lathrop.....	Clinton.
Guitar, Emily, B. L.	Acad.	Columbia.....	Boone.
Guthrie, Charles Claude, M. D.	Med.	Columbia.....	Boone.
Hamlin, Trueman Leigh, A. B.	Acad.	Brunswick, <i>Maine.</i>	
Harshe, Robert Bartholow, B. L.	Acad.	Columbia.....	Boone.
Hatcher, Fanny Belle, A. B.	Acad.	Atlanta, <i>Ga.</i>	
Hauhart, William Frederic, A. B.	Acad.	Ballwin.....	St. Louis.
Hill, Homer Allin, A. B.	Acad.	Golden City.....	Barton.
Hodge, Robert Walter, E. E.	Eng.	Kansas City.....	Jackson.
Horton, Henry Pomeroy, Ph. B.	Acad.	Columbia.....	Boone.
Howard, Walter Lafayette, B. S. in Agr.	Agri.	Griffin.....	Christian.
Ingold, Louis, A. B.	Acad.	Wyconda.....	Clark.
Jenkins, Charles Oscar, A. B.	Acad.	Spring Garden.....	Miller.
Johnson, William Sherman, A. B.	Acad.	Tuscumbia.....	Miller.
Johnston, Eva, A. M.	Acad.	Columbia.....	Boone
Kirchner, Elida Caroline, A. B.	Acad.	St. Louis City.	
Knepper, Myrtle, B. L.	Acad.	Skidmore.....	Nodaway.
Knipmeyer, Arthur Bernhardt, LL. B.	Law.	Higginsville.....	Lafayette.
Lyman, Forest Shepard, B. S. in E. E.	Eng.	Kansas City.....	Jackson.
Lynch, James Lewis, A. B.	Acad.	Independence.....	Jackson.
MacMillan, Grace Eugenie, A. B.	Acad.	Lincoln, <i>Neb.</i>	
Maddox, Joseph Shelby, A. B.	Acad.	Long Branch.....	Monroe.
Moore, George Herbert, LL. B.	Law.	Quincy, <i>Ill.</i>	
Organ, Minnie Katherine, B. L., A. M.	Acad.	Salem.....	Dent.
Patzwald, Otto Reinhold, Ph. B.	Acad.	Adrian, <i>Mich.</i>	
Pinkley, Roy Henry, B. S. in E. E.	Eng.	Chillicothe.....	Livingston.
Ruffner, Charles Shumway, B. S. in E. E.	Eng.	Palmyra.....	Marion.
Shepard, Edward Lewis, B. S. in C. E.	Eng.	Joplin.....	Jasper.
Snider, Guy Edward, B. L.	Acad.	Des Moines, <i>Iowa.</i>	
Summers, Joseph, A. B., A. M.	Acad.	Coffeyburg.....	Daviess.
Tinsley, Nora Maude, A. B.	Acad.	Kahoka.....	Clark.
Turner, William Henry, C. E., M. D.	Med.	Centralia.....	Boone.
Tyler, Elza Edward, B. S.	Acad.	N. Pomona, <i>Cal.</i>	
Underhill, Dillen, M. E.		Mt. Vernon, <i>Ohio.</i>	
VanDeusen, Edgar, A. B.	Acad.	Sproutbrook, <i>N. Y.</i>	
Westlake, Pearl, B. L.	Acad.	Columbia.....	Boone.
Willoughby, Claude Leake, B. Agr.	Agri.	Columbia.....	Boone.
Yanagi-Wara, Suke-Shiga, B. S.	Acad.	Tokitsu, <i>Japan.</i>	

Academic Department.—A. B.

Name.	Postoffice.	County.
<i>Senior Class.</i>		
Allinger, Henry Wesley.....	Bushton, <i>Kans.</i>	
Bannister, William Daniel ..	Monroe City.....	Monroe.
Black, Arthur Geiger.....	Kansas City.....	Jackson.
Blair, Irene Elise.....	Sedalia.....	Pettis.
Boardman, Emma.....	Harrisonville.....	Cass.
Boman, John Sidney.....	Roads.....	Carroll.
Bond, Thomas.....	St. Louis City.	
Braun, Frederick Augustus...	Hickman Mills....	Jackson.
Burk, Milton Clarence.....	Tipton.....	Moniteau.
Burruss, William Bledsoe.....	Columbia.....	Boone.
Busch, Ella Adeline.....	Washington.....	Franklin.
Caldwell, Lou Belle.....	Slater.....	Saline.
Cole, Granville Malcome, Jr.....	Kansas City.....	Jackson.
Dashiell, Laura Henry.....	Columbia.....	Boone.
Davis, Charles Burton.....	Oakwood.....	Ralls.
Dearing, Milton Matthews.....	Columbia.....	Boone.
Deppe, Charles Alexander.....	Glenville.....	Clay.
DuBois, Charles Clifford.....	Kansas City.....	Jackson.
Duffy, Bessie.....	Clinton.....	Henry.
Dyas, Virginia Bouchelle.....	Columbia.....	Boone.
Favor, Ernest Howard.....	Springfield.....	Greene.
Foster, Guy Kenneth.....	Columbia.....	Boone.
Foster, Asa Dillard.....	Springdale.....	Pike.
Fountain, James Richie.....	Centralia.....	Boone.
Gallagher, Leo.....	Warrensburg.....	Johnson.
Gibson, James Edgar.....	Kansas City.....	Jackson.
Gwinn, Joseph Marr.....	Joplin.....	Jasper.
Hamilton, Charles Mortimer.....	Troy.....	Lincoln.
Harrison, John Scott.....	Pethany.....	Harrison.
Hathaway, Bishop.....	Stanberry.....	Gentry.
Henderson, Charles Forest.....	Paris.....	Monroe.
Hook, James Arthur.....	Columbia.....	Boone.
Hopkins, Nelson Orlando.....	Westboro.....	Atchison.
Howell, Shrader Preston.....	Appleton City.....	St. Clair.
Irvine, Ernest Albert.....	Vandalia.....	Audrain.
Jackson, Caroline Ruth.....	Chillicothe.....	Livingston.
Jesse, Richard Henry, Jr.....	Columbia.....	Boone.
Johnson, William Clyde.....	Vandalia.....	Audrain.
Johnson, Oliver Thul.....	St. Louis City.	
Jones, Loren Gilmore.....	Slagle.....	Polk.
Kahn, Thekla.....	Columbia.....	Boone.
Kieffer, Victor Bancroft.....	St. Louis City.	
Leavenworth, George.....	Ste. Genevieve...	Ste. Genevieve
Leib, Cassius M.....	Columbia.....	Boone.
Masters, Stanley Madison.....	Kansas City.....	Jackson.
Montgomery, Helen Belle.....	Columbia.....	Boone.
Montgomery, Maud Ellis.....	Columbia.....	Boone.
Moore, Olin Harris.....	Columbia.....	Boone.
Morehead, Lucy Olive.....	Columbia.....	Boone.
Morlan, Ernest Earl.....	Garden City.....	Cass.
Mullinax, Ira David.....	Princeton.....	Mercer.
McCaslin, Strausie.....	Columbia.....	Boone.
Nesbitt, Florence M.....	St. Joseph.....	Buchanan.
Newell, Anna Gray.....	Carthage.....	Jasper.
Potter, James Arthur.....	Mt. Vernon.....	Lawrence.
Price, Perry Riley.....	Plattsburg.....	Clinton.
Rabourn, Sarah Brewer Francis.....	Columbia.....	Boone.
Rabourn, Susie McDowell Weldon.....	Columbia.....	Boone.
Ramsey, Thomas Orrin.....	Revere.....	Clark.
Reid, Robert Lee.....	Columbia.....	Boone.
Robinson, Harry E.....	Appleton City.....	St. Clair.
Robinson, Roy D.....	Appleton City.....	St. Clair.

Name.	Postoffice.	County.
Schafer, Frederick Charles.....	Lancaster.....	Schuyler.
Scudder, William Russell.....	Kearney.....	Clay.
Shunard, Oliver Garfield.....	Ridgeway.....	Harrison.
Smith, Alfred Hannah.....	Kirksville.....	Adair.
Stone, Sue Marie.....	Columbia.....	Boone.
Storm, Fred Erwin.....	Maryville.....	Nodaway.
Super, Irvine Paul.....	St. Louis City.	
Tuttle, Floyd Wilkins.....	Columbia.....	Boone.
Underwood, Franklin Mason.....	Kansas City.....	Jackson.
Viles, Charles Walter.....	Bolivar.....	Polk.
Walker, George Johnson.....	Monroe City.....	Monroe.
Wallbrunn, Maurice.....	Chillicothe.....	Livingston.
Watson, Sallie Elliott Ashby.....	Fanning.....	Crawford.
Welch, Howard.....	Columbia.....	Boone.
Whealdon, Albert D.....	Caldwell, <i>Ohio</i> .	
Willhite, Benjamin Franklin.....	Barry.....	Platte.
Woods, Melicent Irene.....	Clarinda, <i>Iowa</i> .	

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Junior Class.

Adams, Earl Cranston.....	Linneus.....	Linn.
Alexander, Carter.....	Paris.....	Monroe.
Ammerman, Joseph William.....	Columbia.....	Boone.
Babb, Minerva May.....	Wichita, <i>Kans.</i>	
Baird, James Claud.....	Redding, <i>Iowa</i> .	
Baker Beulah Norvelle.....	Columbia.....	Boone.
Barnett, Mary Jessie.....	Columbia.....	Boone.
Barth, Louis Levy.....	Mexico.....	Audrain.
Bek, William Godfrey.....	Hermann.....	Gasconade.
Bernstorff, Frank Adolph.....	Bushton, <i>Kans.</i>	
Bond, Bessie Brown.....	Ann Arbor, <i>Mich.</i>	
Bonnot, Remigius Edmond August.....	Bonnot's Mill.....	Osage.
Bradsher, Earl.....	Clifton Hill.....	Randolph.
Brewer, Lake.....	Ridgeway.....	Harrison.
Burton, James McCleod.....	Kansas City.....	Jackson.
Caldwell, Robert Breckenridge.....	Nadine.....	Ralls.
Cauthorn, Bessie.....	Columbia.....	Boone.
Chasoff, Jacob.....	Sedalia.....	Pettis.
Collins, Charles.....	Kirkwood.....	St. Louis.
Creason, Josiah Grant.....	Columbia.....	Boone.
Davis, Homer Jason.....	Miller.....	Lawrence.
Deziel, Raymond.....	Barre, <i>Vt.</i>	
Draper, Henry Edgar.....	Columbia.....	Boone.
Dyer, Virginia.....	Lawrence, <i>Kans.</i>	
Edwards, Eliza Russell.....	Centralia.....	Boone.
Ellis, Tom Montgomery.....	Barnard.....	Nodaway.
Enyart, Blanche Earle.....	Stanberry.....	Gentry.
Fogle, Claude Chester.....	Lancaster.....	Schuyler.
Gates, James Milton.....	Montrose.....	Henry.
Gentry, Richard White.....	Sedalia.....	Pettis.
Goodson, William Hammack.....	New Cambria.....	Macon.
Gray, Nellie.....	Columbia.....	Boone.
Gray, Daniel Thomas.....	Stanberry.....	Gentry.
Hamilton, Goldy Mitchell.....	Dwight, <i>Ill.</i>	
Hays, William Henry.....	Jackson.....	Cape Girardeau.
Heyd, Jacob Wilhelm.....	Kirksville.....	Adair.
Higbee, Walter A.....	Lancaster.....	Schuyler.
Hogan, Jesse Franklin.....	Maryville.....	Nodaway.
Judge, Lulah Elizabeth.....	Tyler, <i>Texas</i> .	
Keithly, John Melton Jr.....	O'Fallon.....	St. Charles.
Lamm, George Dennison.....	Sedalia.....	Pettis.
Larkam, Charles Newton.....	Maitland.....	Holt.
Lay, Florence.....	Warsaw.....	Benton.
Loeb, Virgil.....	Columbia.....	Boone.
Love, John Byers.....	Kansas City.....	Jackson.
Lowe, Collier Alden.....	Mokane.....	Callaway.

Name.	Postoffice.	County.
Lutman, Benjamin Franklin.....	Joplin.....	Jasper.
Marshall, Thomas Francis.....	Columbia.....	Boone.
Massie, Alice Ethel.....	Raymore.....	Cass.
Miller, William Frederic.....	Queen City.....	Schuyler.
Moore, Henry Thomas.....	Columbia.....	Boone.
McBaine, Richard Hiram.....	Columbia.....	Boone.
McCaleb, Rebecca Isabel.....	Tarkio.....	Atchison.
Nardin, William Thompson.....	Vandalia.....	Audrain.
Niebruegge, William Frederic.....	Mt. Sterling.....	Gasconade.
Nowell, Fannie R.....	Columbia.....	Boone.
Orear, Marvin Luther.....	Slater.....	Saline.
Packard, Eva Lorena.....	Cameron.....	Clinton.
Philbrook, Lee Elmo.....	Kansas City.....	Jackson.
Prentis, Henning Webb, Jr.....	St. Louis City.....	
Ramsey, Mrs. Clara S.....	Columbia.....	Boone.
Riggs, Jephtha.....	Crab Orchard.....	Ray.
Schlierholz, Flora Mary.....	St. Louis City.....	
Sloop, Charles J.....	Queen City.....	Schuyler.
Steele, Oliver Lee.....	Carmi, Ill.....	
Steele, Charles Dugan.....	Norton.....	Saline.
Stephens, Edwin Sydney.....	Columbia.....	Boone.
Stone, Ira Thomas Gabbert.....	Columbia.....	Boone.
Stoner, Carolyn.....	Kansas City.....	Jackson.
Stump, Maggie Lou.....	Nevada.....	Vernon.
Turner, James Ernest.....	Kansas City.....	Jackson.
Urban, Fred Wagner.....	Stewartsville.....	DeKalb.
Vaeth, Joseph Anthony.....	St. Genevieve.....	St. Genevieve.
VandeVeer, William T.....	King City.....	Gentry.
Walker, Mary Shore.....	Columbia.....	Boone.
Watson, Malcolm Clyde.....	Riggs.....	Boone.
Welch, John Gunn.....	Columbia.....	Boone.
White, Robert Ernest.....	Harrisonville.....	Cass.
Williams, Mrs. Elizabeth Houx.....	Warrensburg.....	Johnson.
Williams, Roy Draffen.....	Boonville.....	Cooper.
Winslow, Isabella Austin.....	Kansas City.....	Jackson.
Withers, Allen Lee.....	Kansas City.....	Jackson.
Woodson, Aytch Perrin.....	Kansas City.....	Jackson.
Wornall, Rowan Buchanan.....	Kansas City.....	Jackson.

Sophomore Class.

Abernathy, Robert Turner.....	Corsicana.....	Barry.
Alexander, Roger Gordon.....	Paris.....	Monroe.
Alexander, Wallace.....	Kirksville.....	Adair.
Allee, Warren Logan.....	Olean.....	Miller.
Allen, Elmer Jackson.....	Dadeville.....	Dade.
Anderson, Axel Isadore.....	Kansas City.....	Jackson.
Ankeney, John Sites, Jr.....	Columbia.....	Boone.
Barnes, Maude.....	Ft. Smith, Ark.....	
Bates, Leslie E.....	Excelsior Springs.....	Clay.
Biggs, Everett Elmo.....	Ashland.....	Boone.
Birch, Frank Hewitt.....	Hannibal.....	Marion.
Bodenheimer, Sophia.....	Jefferson City.....	Cole.
Borgstadt, Harry.....	Concordia.....	Lafayette.
Branham, Madeline.....	Columbia.....	Boone.
Brown, Harley LeRoy.....	Trenton.....	Grundy.
Brown, Herbert Everly.....	Trenton.....	Grundy.
Burruss, Marion.....	Columbia.....	Boone.
Canada, Charles Walden.....	Shafer.....	Linn.
Carmack, James Abner.....	Bute.....	Sullivan.
Carrington, Will John.....	Jefferson City.....	Cole.
Cauthorn, Emma.....	Columbia.....	Boone.
Cobb, Samuel Franklin.....	Columbia.....	Boone.
Cochel, Charlotte Calvin.....	Columbia.....	Boone.
Cole, Norman John.....	Quaker.....	Washington.
Conway, Mary Ellen.....	Vandalia.....	Audrain.

Name.	Postoffice.	County.
Coontz, Laura.....	Vandalia.....	Audrain.
Cosby, Byron.....	Spruce	Bates.
Cowan, Robert Dinwiddie	Dadeville	Dade.
Craig, James Herman.....	Cyrene	Pike.
Denton, Clarabel	Kansas City.....	Jackson.
Dimmitt, Philip Vaughn.....	Columbia.....	Boone.
Dockery, Leota Lillian.....	Kirksville	Adair.
Donnell, Forrest C.....	Maryville.....	Nodaway.
Dungan, Edith	Oregon	Holt.
Eddy, Helen Marie.....	Humeston, <i>Iowa</i>	
Elliott, James Miles.....	Boonville	Cooper.
Evans, John Roswell.....	Maryville.....	Nodaway.
Fair, Eugene.....	Gilman City	Harrison.
Ferguson, Robert Murphy	Mound City.....	Holt.
Fisher, Russell Alvin.....	Joplin.....	Jasper.
Fleming, Annie Laurie	Columbia.....	Boone.
Frazier, Leland.....	Grand Centre....	Randolph.
Freeman, Herman Harrison.....	Paris	Monroe.
Gaede, Evelyn Estella.....	Fairfax	Atchison.
Gilleland, Anna	Gunn City	Cass.
Gleason, Roy Lee.....	St. Louis City.....	
Gore, Abner Ellis.....	Marshall.....	Saline.
Gray, Laura	Columbia.....	Boone.
Green, Ernest Abner	Desoto.....	Jefferson.
Hayhurst, Paul.....	Fredonia, <i>N. Y.</i>	
Hobart, Frank Grant	Sedalia.....	Pettis.
Hoffman, Luella Dimmitt	Sedalia.....	Pettis.
Hogsett, William Sloan	Kansas City.....	Jackson.
Holden, Nancy Esther.....	Albany.....	Gentry.
Houck, Rudolph Senn.....	Bloomfield	Stoddard.
Houx, Roberta M.....	Warrensburg.....	Johnson.
Hutchinson, Mrs. Katherine Ventres.....	Columbia.....	Boone.
Johnson, Grace G.....	Hamilton.....	Caldwell.
Johnston, Roy Meridith	Ft. Smith, <i>Ark.</i>	
Justice, Aubrey Arden.....	Lancaster.....	Schuyler.
Kelsey, Fred	Lewiston, <i>Idaho</i>	
Kendall, Eugene Lamont.....	Kirkwood	St. Louis.
Kennedy, Gertrude Sarah	St. Louis City.....	
Koch, Clara May Barbara.....	LaGrange	Lewis.
Laffoon, Clint Allen	Kearney	Clay.
Langsdale, Clifton	Kansas City	Jackson.
Lauderbach, Fayon Ernest.....	Kansas City	Jackson.
Leffler, Shepherd.....	Maryville.....	Nodaway.
Lentz, John William	Lake City.....	Jackson.
Lewis, Mildred Duratt	Columbia.....	Boone.
Liggett, Mrs. Gertrude.....	Stanberry.....	Gentry.
Long, C. M.....	Hallsville.....	Boone.
Lowe, Mary Maude	Warrensburg.....	Johnson.
Lusk, Laura.....	Garden City.....	Cass.
Lyon, Harris Merton.....	Kansas City	Jackson.
Maddox, Roy Oswald.....	Snowdon.....	Linn.
Marks, Abe.....	Columbia	Boone.
Monroe, Walter Scott	Albany	Gentry.
Munday, Emma	Canton	Lewis.
McCarty, Amy Rowena.....	Hannibal.....	Marion.
McFarland, Daniel.....	Kansas City.....	Jackson.
McGuire, Ivie.....	Kirksville.....	Adair.
McKee, Herbert Nelson.....	Zalmer.....	Bollinger.
McMillen, Robert Nelson, Jr.....	Iola, <i>Kans.</i>	
Nardin, George F.....	Vandalia.....	Audrain.
Neal, Maude Hampton.....	Kansas City.....	Jackson.
Nelson, Earl Fontaine.....	Milan	Sullivan.
Nicholas, Susan Alice.....	Kirksville	Adair.
Okubo, Takeshi.....	Tokushima, <i>Japan</i>	
Penter, Benton Johnston.....	Ashland.....	Boone.
Pittman, Maude Lillian.....	Independence.....	Jackson.
Potter, Maud.....	Columbia.....	Boone.

Name.	Postoffice.	County.
Powell, Lida.....	Mexico	Audrain.
Raybourn, Paul Drennan	Butler	Bates.
Reed, Leonidas Fielden	Canon City, <i>Colo.</i>	
Rice, Samuel Orrick.....	Neosho.....	Newton.
Riley, Floyd Burke.....	Kearney	Clay.
Rodes, Charles Bradford, Jr.....	Sedalia	Pettis.
Rowe, John J.....	Appleton City.....	St. Clair.
Ruenzi, Williametta	Columbia	Boone.
Saunders, Daniel Green, Jr.....	Kansas City	Jackson.
Schooling, Lacy Parks.....	Middle Grove.....	Monroe.
Scott, Pryor Templeton.....	Richards.....	Vernon.
Searcy, Laura Anita.....	Columbia	Boone.
Setzler, Edward Allan.....	Kansas City.....	Jackson.
Shellenberger, Walter Jeremiah.....	Mound City.....	Holt.
Shellenberger, George Irvin.....	Mound City.....	Holt.
Singleton, Martha Racelle.....	Paris.....	Monroe.
Six, Billie Pearl.....	Kirksville.....	Adair.
Smith, Thomas K.....	Glenwood	Schuyler.
Smith, Harry Bates	Richmond	Ray.
Starling, Marie Antoinette.....	Greenville, <i>Miss.</i>	
Sweet, Arthur T.....	Curryville.....	Pike.
Temple, Charles Edward.....	Stanberry.....	Gentry.
Tennyson, Luther Wesley.....	Belgrade.....	Washington.
Tyler, Earle Graves.....	Howell.....	St. Charles.
Tymony, Carrie Wisdom.....	Higbee.....	Randolph.
Veatch, Otto.....	Webb City.....	Jasper.
Walker, Charles Joseph.....	Columbia.....	Boone.
Westlake, Dixie Llewellyn.....	Columbia.....	Boone.
Wood, William Logan.....	Canon City, <i>Colo.</i>	
Wronker Charlotte.....	Marshall.....	Saline.
Zimmerman, Alice.....	Sedalia.....	Pettis.
Zollinger, John H., Jr	Otterville.....	Cooper.

Freshman Class.

Alexander, George Forest	Gallatin	Daviess.
Allen, Archibald Murray.....	Columbia.....	Boone.
Anderson, Roscoe Florence.....	La Belle.....	Lewis.
Arnold, Charles.....	Ashland	Boone.
Barnett, George.....	Sedalia.....	Pettis.
Barnett, Raymond G.....	Kansas City.....	Jackson.
Bassett, Vinnie.....	Paris.....	Monroe.
Bedinger, Henry Garrett.....	Anchorage, <i>Ky.</i>	
Beery, Roy Funkhouser.....	Holt.....	Clay.
Blanton, Mary Virginia	Columbia	Boone.
Blodgett, Ralph Eugene.....	Shelbina.....	Shelby.
Bones, Nelle Edith	Carthage, <i>N. Y.</i>	
Boulware, George William Wickliffe.....	Wanamaker	Saline.
Bowling, Charles Campbell	Columbia.....	Boone.
Bradbury, Royall Douglass	Kansas City	Jackson.
Briggs, Lee Roscoe.....	Memphis.....	Scotland.
Bristol, Alice Josephine.....	Webster Grove.....	St. Louis.
Brooks, Clyde.....	Columbia.....	Boone.
Brunjes, Ernest August.....	Warsaw.....	Benton.
Brunjes, Albert Peter.....	Warsaw.....	Benton.
Buckmaster, Paulina.....	Pilot Grove.....	Cooper.
Burton, Jesse Lee Adams.....	Carthage.....	Jasper.
Calvert, George Washington, Jr.....	Nadine.....	Rails.
Carr, Walter Copeland	Wellington, <i>Kans.</i>	
Carter, Ewall Martin.....	Hallsville.....	Boone.
Chapman, Charles Homer.....	Chillicothe.....	Livingston.
Clevenger, Joseph Raymond.....	Excelsior Springs.....	Clay.
Cole, Charles Arthur.....	Quaker.....	Washington.
Cole, Redmond Selecman.....	Columbia.....	Boone.
Colvin, George Henry.....	Newcomer.....	Chariton.
Comer, Edward Smith.....	Mound City.....	Holt.

Name.	Postoffice.	County.
Comstock, Clark Wesley	King City.....	Gentry.
Cottrill, Bernit Clyde	Savannah.....	Andrew.
Craig, James Edward	Poplar Bluff.....	Butler.
Crouch, Clarence Clinton	Columbia.....	Boone.
de Steigner, Walter George	St. Joseph.....	Buchanan.
Douglass, William Burr	Kansas City.....	Jackson.
Drummond, Wellington	Jamesport.....	Daviess.
Durley, Leonidas Edgar	Hughesville.....	Pettis.
Duvall, Jennie Adelina	Harrisonville.....	Cass.
Dyer, Roy Homer	Shackelford.....	Saline.
Eastman, Fred Ward	Winston.....	Daviess.
Edwards, Katherine	Centralia.....	Boone.
Eitzen, Hertha A	Boonville.....	Cooper.
Elliott, Edith Ione	Carthage.....	Jasper.
Ferguson, James Taylor	Mokane.....	Callaway.
Fields, Grace	Columbia.....	Boone.
Fleming, Marie	Columbia.....	Boone.
Forrester, Bruce	Kansas City.....	Jackson.
Foster, Ina Harris	Columbia.....	Boone.
Gauss, Louise F	Kansas City.....	Jackson.
Gentry, Reuben Joel	Sedalia.....	Pettis.
Gentry, Lee Morrison	Sedalia.....	Pettis.
Gibbons, Irvin Earnest	Poplar Bluff.....	Butler.
Gordon, Sadie Long	Columbia.....	Boone.
Gross, Frank Ferdinand	Brunswick.....	Chariton.
Guthrie, Fannie Virginia	Columbia.....	Boone.
Hall, Margaret Hollins	Prairie Hill.....	Chariton.
Hall, Nicholas Corwin	Tarkio.....	Atchison.
Harris, Anna Leigh	Webster Groves.....	St. Louis.
Hartwell, Charles Norris	Teng Chow Fu.....	China.
Haynes, Eli Stuart	Trenton.....	Grundy.
Hennicke, Dora M	Boonville.....	Cooper.
Herndon, Georgia Hazel	Lamar.....	Barton.
Hewes, Clarence	Trenton.....	Grundy.
Hewitt, John V	Shelbyville.....	Shelby.
Hollingstead, Ralph Earl	Joplin.....	Jasper.
Holmes, Florence Flagler	La Belle.....	Lewis.
Horner, Glen Roy	Deepwater.....	Henry.
Howard, Nina Aubrey	Slater.....	Saline.
Hughes, Uriel Wright	Miami.....	Saline.
Hulett, Oilene Gilmer	Hallsville.....	Boone.
Hume, Leslie Walker	Armstrong.....	Howard.
Huston, Beulah	Windsor.....	Henry.
Ingold, Warren	Wyaconda.....	Clark.
Jackson, Eliza Lucile	Martinstown.....	Putnam.
Jeffries, Alonzo	Columbia.....	Boone.
Jesse, Caroline Elizabeth	Columbia.....	Boone.
Jesse, Mary Polk	Columbia.....	Boone.
Jesse, Mary Daniel	Litwalton, Va.	
Johnson, Isabell	Columbia.....	Boone.
Jones, Edna Bascom	Chillicothe.....	Livingston.
Kimpel, Ben Drew	Dermot, Ark.	
Kincannon, Fred	Granby.....	Newton.
Leaphart, Charles William	Brookfield.....	Linn.
Leib, Mrs. Cassius M	Columbia.....	Boone.
Long, Clarence Columbus	Whiteside.....	Lincoln.
Lowry, Etheiyn Margaret	Walker.....	Vernon.
Marsh, Annie Elizabeth	Columbia.....	Boone.
Marsh, Samuel Ferguson	King City.....	Gentry.
Martin, Charles Knox	Doniphan.....	Ripley.
Moling, Lura May	Bethany.....	Harrison.
Moore, Burnes, Vaughan	Kansas City.....	Jackson.
Moss, Katherine	Paris.....	Monroe.
Mullinax, Eli Nathaniel, Jr	Princeton.....	Mercer.
Myers, Robert Lee	Ash Grove.....	Greene.
McCallon, Emma	Rankin.....	Andrew.

Name.	Postoffice.	County.
McDaniel, Oscar.....	Fawcett	Buchanan.
McGill, Caroline.....	Lebanon.....	Laclede.
McGlothlin, Mary Edith.....	Columbia.....	Boone.
McLemore, Clyde.....	Everton	Dade.
McQuitty, Ewell F.....	Columbia.....	Boone.
Newkirk, Cora Matilde	La Belle	Lewis.
Newman, John Henry.....	Fontainbleau.....	Andrew.
Norton, Jennie Rose.....	Sedalia.....	Pettis.
O'Hara, Barratt.....	St. Joseph, <i>Mich.</i>	
Osborne, Sarah Janet.....	Odessa.....	Lafayette.
Palmer, Bessie Roberts.....	Elsberry	Lincoln.
Parker, Harry Field.....	Warrensburg.....	Johnson.
Pew, Emmett.....	Middletown.....	Montgomery.
Pierce, Harry Llewellyn.....	Columbia.....	Boone.
Playter, Wellington Arthur.....	Fredonia, <i>N. Y.</i>	
Potts, Roscoe Fairbanks	Kansas City	Jackson.
Price, Mable Winafred.....	Slater.....	Saline.
Price, John Emmet.....	Harrisonville.....	Cass.
Reid, Turner Wilson.....	Slater.....	Saline.
Reid, James D.....	Slater.....	Saline.
Robb, Florence.....	Greenville, <i>Miss.</i>	
Robertson, Alta Abel.....	Clarksburg	Moniteau.
Robertson, David Hiner.....	Mexico.....	Audrain.
Rollins, Frank Bingham	Columbia.....	Boone.
Rollins, John Clarkson.....	Columbia.....	Boone.
Ross, Charles Griffith.....	Independence	Jackson.
Russell, Walter Clarence.....	Columbia	Boone.
Sanders, Mabel Waugh	Columbia	Boone.
Schmidt, Bertha Grace.....	Hannibal	Marion.
Schooler, George Harold.....	Carthage.....	Jasper.
Sears, Herbert Ivison.....	LaPlata.....	Macon.
See, Lulu Mabelle	Jefferson City.....	Cole.
Shelton, Charles William	Lancaster.....	Schuyler.
Shockley, Maude Alice.....	Columbia.....	Boone.
Singleton, Martha Racelle.....	Paris.....	Monroe.
Skidmore, Mark.....	Springfield.....	Greene.
Smith, Nelle Howard.....	Fayette.....	Howard.
Smith, Gene Irvin.....	Monticello, <i>Kans.</i>	
Spicer, Inez.....	Columbia.....	Boone.
Stewart, George Earle.....	Merwin.....	Bates.
Stoner, Edith.....	Kansas City.....	Jackson.
Stump, Vivian French.....	Nevada.....	Vernon.
Terrell, Gussie May.....	Macon.....	Macon.
Varney, John Alexander.....	Paris.....	Monroe.
Ward, James Gordon.....	Balm.....	Cedar.
Ward, Walter Delbert.....	Skidmore.....	Nodaway.
Wayman, Warrick Allen.....	Kansas City.....	Jackson.
Welborn, Arthur Tarance.....	Bloomfield.....	Stoddard.
Weltz, Lois.....	Oregon.....	Holt.
White, Hazel.....	Norborne.....	Carroll.
Whitecotton, Andrew Tilden.....	Paris.....	Monroe.
Whiteford, Flora.....	Barnard.....	Nodaway.
Wiley, Frank Leslie.....	Ridgeway	Harrison.
Williams, Helen.....	California	Moniteau.
Wilson, Garland.....	Bethany.....	Harrison.
Withers, John Thomas, Jr.....	Poplar Bluff.....	Butler.
Wood, Harry Cunningham.....	New London.....	Ralls.
Woodson, Thomas Dupuy, Jr.....	Richmond	Ray.
Wright, Anna Elizabeth.....	Norborne.....	Carroll.
Wright, Porter.....	Chilhowee.....	Johnson.
Wright, Kirby Smith.....	Ashley.....	Pike.
Wulff, Henry Jacob.....	St. Louis City.....	

Special Students.

Adkisson, Jean.....	Kansas City.....	Jackson.
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Name.	Postoffice.	County.
Alexander, Charles.....	Blackburn.....	Saline.
Alexander, Lena Elizabeth.....	Hilldale.....	Howard.
Allen, Francis Eugene.....	Barry, <i>Ill.</i>	
Armstrong, Mrs. Alta May.....	Hermitage.....	Hickory.
Arnold, Mrs. Medora Castlio.....	San Jose, <i>Cal.</i>	
Arthur, Sylvester Irvin.....	Union City, <i>Ind.</i>	
Arthur, Walter.....	Avilla.....	Jasper.
Babb, Mrs. Clara Louise.....	Columbia.....	Boone.
Beal, Charles Laurent.....	Maryville.....	Nodaway.
Boone, Lizzie.....	Boonville.....	Cooper.
Botts, Bennie.....	Columbia.....	Boone.
Botts, Cassandra.....	Columbia.....	Boone.
Burgess, Julia Goyer.....	Columbia.....	Boone.
Campbell, William Richard.....	Clinton.....	Henry.
Collier, Joseph Stewart.....	New Market.....	Platte.
Colwell, Elmira Edna.....	La Grange.....	Lewis.
Cummings, Anna Victoria.....	Gower.....	Clinton.
Dean, Finis.....	ElDorado Springs	Cedar.
Divers, William Perry.....	Auxvasse.....	Callaway.
Dooley, Marion Sylvester.....	Houston.....	Texas.
Fisher, Mary McFarlane.....	Columbia.....	Boone.
Fowler, Joseph Johnson.....	Sedalia.....	Pettis.
Gentry, Laura D.....	Sedalia.....	Pettis.
Gentry, North Todd.....	Columbia.....	Boone.
Gordon, Clara Lisle.....	Columbia.....	Boone.
Griffith, Margaret.....	Columbia.....	Boone.
Guthrie, Lulu Bayle.....	Hillside.....	St. Louis.
Hardy, Carolyn.....	Dye.....	Platte.
Harris, Albert Sidney.....	Nashville, <i>Tenn.</i>	
Henderson, Louise.....	Talpa.....	Lawrence.
Hentschel, Gottfried.....	Columbia.....	Boone.
Hoffman, Benjamin Franklin.....	Baxter Springs.....	<i>Kan.</i>
Hornor, Lillienne Anne.....	Carthage.....	Jasper.
Howard, Thomas Perry.....	Columbia.....	Boone.
Jesse, Mrs. Addie Polk.....	Buffalo.....	Dallas.
Jones, Abner.....	Columbia.....	Boone.
Kahn, Augusta.....	Harrodsburg, <i>Ky.</i>	
Laws, Lucy Rhoda.....	Baldwin, <i>Kans.</i>	
Leah, Minnie Lora.....	Warsaw.....	Benton.
Lingle, Emma Clark.....	Columbia.....	Boone.
Long, Laura Virginia.....	Burksville.....	Shelby.
Looney, Charles Alexander.....	Mountain Grove.....	Wright.
Lynch, Florence.....	Mexico.....	Audrain.
Macfarlane, Mrs. Alice O.....	Kansas City.....	Jackson.
Morrin, Mrs. Mark J.....	Columbia.....	Boone.
McAfee, Mary.....	Columbia.....	Boone.
McGhee, Lillian.....	Columbia.....	Boone.
Norvell, Logan Ray.....	Fulton, <i>Ky.</i>	
Nugent, Aubrey Malachi.....	Paris.....	Monroe.
Payne, Orion, LeRoy.....	White's Store.....	Howard.
Peeler, Eva Mae.....	Columbia.....	Boone.
Pemberton, Morton Horde.....	Columbia.....	Boone.
Pemberton, Mrs. Morton Horde.....	Mountain Grove.....	Wright.
Robertson, Cora Edna.....	Lovelake.....	Macon.
Romjue, Mrs. Maude N.....	Columbia.....	Boone.
Shipley, Edith M.....	Centralia.....	Boone.
Show, Marshall McMahon.....	Columbia.....	Boone.
Thilly, Mrs. Jessie M.....	Stewartsville.....	Dekalb.
Urban, Mrs. Fred W.....	Cushman, <i>Ark.</i>	
Vaughn, Ernest Van Court.....	Windsor.....	Henry.
Waddill, Anna May.....	Windsor.....	Henry.
Waddill, Alice Nelson.....	Cameron.....	Clinton.
Williams, Maude.....	Poplar Bluff.....	Butler.
Withers, John Thomas, Sr.....	Boyer.....	Wright.
Wood, James Madison.....		

Department of Education.

Name	Postoffice.	County.
Alexander, Carter.....	Paris	Monroe.
Alexander, Roger Gordon.....	Paris	Monroe.
Allinger, Henry Wesley.....	Bushton, <i>Kansas</i>	
Asling, Alexis Cornelius.....	Kansas City	Jackson.
Babb, Minerva May.....	Wichita, <i>Kansas</i>	
Baker, Beulah Norvelle.....	Columbia.....	Boone.
*Ballenger, William White.....	McBaine.....	Boone.
Barnett, Mary Jesse.....	Columbia.....	Boone.
Bassett, Vinnie.....	Paris.....	Monroe.
*Beasley, George Hamilton.....	Columbia.....	Boone.
Bernstorff, Frank Adolph.....	Bushton, <i>Kansas</i>	
Biggs, Everett Elmo.....	Ashland.....	Boone.
Blair, Irene Elise.....	Sedalia.....	Pettis.
Boardman, Emma.....	Harrisonville.....	Cass.
Bones, Nelle Edith.....	Carthage.....	Jasper.
*Bradley, Harry Everett.....	St. Louis City.....	
*Branham, Madeline.....	Columbia.....	Boone.
Braun, Frederick Augustus.....	Hickman Mills.....	Jackson.
*Bristol, Alice Josephine.....	Webster Groves.....	St. Louis.
*Burruss, Marion.....	Columbia.....	Boone.
Caldwell, Lou Belle.....	Slater.....	Saline.
*Campbell, Laura Belle.....	Columbia.....	Boone.
Campbell, William Richard.....	Clinton.....	Henry.
Carter, Ewell Martin.....	Hallsville.....	Boone.
Cauthorn, Bessie.....	Columbia.....	Boone.
Cobb, Samuel Franklin.....	Columbia.....	Boone.
Cochel, Charlotte Calvin.....	Columbia.....	Boone.
*Collins, Charles.....	Kirkwood.....	St. Louis.
*Comer, Edward Smith.....	Mound City.....	Holt.
Cosby, Byron.....	Spruce.....	Bates.
*Craig, James Herman.....	Cyrene.....	Pike.
*Crumbaugh, Lucy Cornelia.....	Columbia.....	Boone.
Dashiell, Laura Henry.....	Columbia.....	Boone.
Davidson, Hope Lorimer.....	Des Moines, <i>Iowa</i>	
Davis, Homer Jason.....	Miller.....	Lawrence.
Davis, Charles B.....	Oakwood.....	Ralls.
Denton, Clarabel.....	Kansas City.....	Jackson.
Deppe, Charles Alexander.....	Glenville, <i>Neb.</i>	
Deziel, Raymond.....	Barre, <i>Vermont</i>	
*Douglass, William Burr.....	Kansas City.....	Jackson.
Duffy, Bessie.....	Clinton.....	Henry.
*Dyer, Virginia.....	Lawrence, <i>Kansas</i>	
Elliott, Edith Ione.....	Carthage.....	Jasper.
Ellis, Tom Montgomery.....	Barnard.....	Nodaway.
Enyart, Blanche Earle.....	Stanberry.....	Gentry.
Evers, Helen Margaret.....	St. Louis City.....	
*Fewsmith, Hettie Joy.....	Columbia.....	Boone.
*Ficklin, Mrs. Ella Cochel.....	Columbia.....	Boone.
Fields, Grace.....	Columbia.....	Boone.
*Flood, Sallie Rochester.....	Columbia.....	Boone.
Foster, Asa Dillard.....	Springdale.....	Pike.
Foster, Guy Kenneth.....	Columbia.....	Boone.
Fountain, James Richie.....	Centralia.....	Boone.
*Gates, Daniel Taylor.....	Montrose.....	Henry.
Gauss, Louise F.....	Kansas City.....	Jackson.
Gentry, Richard White.....	Sedalia.....	Pettis.
*Gilliland, Anna.....	Gunn City.....	Cass.
*Glover, Lynn.....	Ham's Prairie.....	Callaway.
Gordon, Clara Lisle.....	Columbia.....	Boone.
Gordon, Sadie Long.....	Columbia.....	Boone.
Gray, Nellie.....	Columbia.....	Boone.
*Gribble, Lois.....	Columbia.....	Boone.
*Griffith, Florence Fisher.....	Columbia.....	Boone.
*Guthrie, Lulu Bayle.....	Columbia.....	Boone.

Name.	Postoffice.	County.
*Haggard, Cinnie.	Columbia	Boone.
Hall, Nicholas C.	Tarkio	Atchison.
Hamilton, Goldy Mitchell	Dwight, <i>Ill.</i>	
Harrison, John Scott.	Bethany	Harrison.
*Harshe, Robert Bartholow	Columbia	Boone.
Hathaway, Bishop	Stanberry	Gentry.
*Hayes, Minnie Robert	Columbia	Boone.
*Hayhurst, Paul	Fredonia, <i>N. Y.</i>	
Henderson, Charles Forest.	Paris	Monroe.
Hennicke, Dora M.	Boonville	Cooper.
Hill, Homer Allin	Golden City	Barton.
Hopkins, Nelson Orlando	Westboro.	Atchison.
Howell, Shrader Preston.	Appleton City.	St. Clair.
Hulett, Ollene Gilmer	Hallsville	Boone.
Irvine, Ernest Albert.	Vandalia	Audrain.
Jackson, Caroline Ruth.	Chillicothe	Livingston.
Johnson, William Clyde.	Vandalia	Audrain.
Johnson, Grace G.	Hamilton	Caldwell.
Jones, Loren Gilmore	Slagle	Polk.
Kahn, Theckla	Columbia	Boone.
*Kahn, Augusta.	Columbia	Boone.
Kennedy, Gertrude Sarah.	St. Louis City.	
Kirchner, Elida Caroline.	St. Louis City.	
*Kneisley, Sallie Rollins.	Columbia	Boone.
Koch, Clara May B.	LaGrange	Lewis.
*Kurtz, Loula Lenoir	Columbia	Boone.
Laffoon, Clint Allen	Kearney	Clay.
Leaphart, Charles William.	Brookfield	Linn.
Leib, Cassius M.	Columbia	Boone.
*Leib, Mrs. Cassius M.	Columbia	Boone.
Lentz, John William	Lake City	Jackson.
Lewis, Mildred Duval.	Columbia	Boone.
Liggett, Mrs. Gertrude.	Stanberry	Gentry.
Lutman, Benjamin Franklin.	Joplin	Jasper.
Lynch, James Lewis.	Independence	Jackson.
*MacCabe, Richard S.	Springfield	Greene.
*MacLay, Edgar Gleim	Tipton	Moniteau.
*Marsh, Annie Elizabeth.	Columbia	Boone.
Marshall, Thomas Franklin	Columbia	Boone.
Massie, Alice Ethil.	Raymcre	Cass.
Maynard, John Lafayette.	Mt. Vernon	Lawrence.
Montgomery, Helen Bell	Columbia	Boone.
Montgomery, Maud Ellis.	Columbia	Boone.
Moore, Henry Thomas	Columbia	Boone.
Morehead, Lucy Olive	Columbia	Boone.
Morrison, Oliver Monroe.	Stanberry	Gentry.
Moss, Katherine.	Paris	Monroe.
*Murry, Nettie Lee.	Murry	Boone.
McCallon, Emma.	Rankin	Andrew.
McCaslin, Strausie.	Columbia	Boone.
*McDaniel, Oscar	Faucett	Buchanan.
*McGhee, Lillian	Columbia	Boone.
*McGill, Caroline.	Lebanon	Laclede.
*McGlothlin, Mary Edith	Columbia	Boone.
*McGuire, Ivie.	Kirksville	Adair.
Newell, Anna Gray	Carthage	Jasper.
Niebruegge, William Frederic	Mt. Sterling	Gasconade.
Norton, Jennie Rose.	Sedalia	Pettis.
Nowell, Frances R.	Columbia	Boone.
Orear, Marvin Luther.	Slater	Saline.
Packard, Eva Lorena.	Cameron	Clinton.
Palmer, Bessie Roberts.	Elsberry	Lincoln.
Payne, Orion Lee Roy.	Paris	Monroe.
Pitman, Maude Lillian.	Independence	Jackson.
*Potter, James Arthur.	Mt. Vernon	Lawrence.
*Potts, Lizzie	Salisbury	Chariton.

Name.	Postoffice.	County.
*Pulliam, Susie.....	Deer Park..	Boone.
Rabourn, Sara Brewer Francis...	Columbia..	Boone.
Rabourn, Susie McDowell Weldon.....	Columbia.....	Boone.
Ramsey, Thomas Orrin.....	Revere.....	Clark.
Raybourn, Paul Drennan.....	Butler.....	Bates.
Reid, Robert Lee.....	Columbia.....	Boone.
*Saunders, Daniel Green, Jr.....	Kansas City.....	Jackson.
Schlierholz, Flora Mary.....	St. Louis City.....	
*Schmidt, Bertha Grace.....	Hannibal.....	Marion.
See, Lulu Mabelle.....	Jefferson City.....	Cole.
*Shellenberger, Walter Jeremiah.....	Mound City.....	Holt.
*Shellenberger, George Irvin.....	Mound City.....	Holt.
*Shipley, Edith M.....	Columbia.....	Boone.
*Simmons, Emma Gertrude.....	Berryville, Ark.....	
*Sinclair, Margaret.....	Columbia.....	Boone.
Spicer, Inez.....	Columbia.....	Boone.
Steele, Oliver Lee.....	Carmi, Ill.....	
Steele, Charles Dugan.....	Norton.....	Saline.
Stone, Sue Marie.....	Columbia.....	Boone.
Stoner, Edith.....	Kansas City.....	Jackson.
Stoner, Carolyn.....	Kansas City.....	Jackson.
Stump, Maggie Lou.....	Nevada.....	Vernon.
*Super, Irvine Paul.....	St. Louis City.....	
Sweet, Arthur T.....	Curryville.....	Pike.
Thurman, Harold Clark.....	Lamar.....	Barton.
*Tinsley, Nora Maude.....	Kahoka.....	Clark.
*Turner, James Ernest.....	Kansas City.....	Jackson.
Tuttle, Floyd Wilkins.....	Columbia.....	Boone.
Underwood, Franklin Mason.....	Kansas City.....	Jackson.
VanderVeer, William T.....	King City.....	Gentry.
Varney, John Alexander.....	Paris.....	Monroe.
Walker, Mary Shore.....	Columbia.....	Boone.
*Ward, Walter Delbert.....	Skidmore.....	Nodaway.
Watson, Malcolm Clyde.....	Riggs.....	Boone.
Watson, Sallie Elliott Ashby.....	Fanning.....	Crawford.
*Westlake, Dixie L.....	Columbia.....	Boone.
Westlake, Pearl.....	Columbia.....	Boone.
White, Robert Ernest.....	Harrisonville.....	Cass.
Whitcotton, Andrew Tilden.....	Paris.....	Monroe.
Whiteford, Flora.....	Barnard.....	Nodaway.
Wiley, Frank Leslie.....	Ridgeway.....	Harrison.
Willhite, Benjamin Franklin.....	Barry.....	Platte.
Williams, Helen.....	California.....	Moniteau.
Winslow, Isabella Austin.....	Kansas City.....	Jackson.
*Withall, Frank C.....	St. Louis City.....	
Withers, John Thomas Sr.....	Poplar Bluff.....	Butler.
Woods, Melicent Irene.....	Clarinda, Iowa.....	
Wronker, Charlotte.....	Marshall.....	Saline.

(*) Those marked with * take no Pedagogy.

Law Department.

Name.	Postoffice.	County.
<i>Graduate Class.</i>		
Knipmeyer, Arthur Bernhardt, LL. B.....	Higginsville. . .	Lafayette.
Moore, George Herbert, LL. B.....	Quincy, <i>Ill.</i>	
<i>Senior Class—Two Years' Course.</i>		
Anderson, Alexander Lake.....	Lobelia, <i>W. Va.</i>	
Anderson, Lilbourne Morris.....	Hannibal.....	Marion.
Armstrong, John Wesley.....	Hermitage.....	Hickory.
Arnold, Mercer.....	Joplin.....	Jasper.
Beatty, William.....	Knob Noster.....	Johnson.
Benson, Wallace McDowell.....	Smithville, <i>Texas.</i>	
Birdseye, Henry Fred.....	Nevada.....	Vernon.
Bradley, John Henderson.....	Senath.....	Dunklin.
Broadhead, Harry Howard.....	Columbia.....	Boone.
Brown, John Griest.....	Edina.....	Knox.
Bruton, Arthur.....	Centralia.....	Boone.
Burch, Walter.....	Ladonia.....	Audrain.
Burruss, William Bledsoe.....	Columbia.....	Boone.
Cable, John Gore.....	Oakwood.....	Ralls.
Caruthers, Robert Looney.....	Kennett.....	Dunklin.
Chaney, Walter Lee.....	Kansas City.....	Jackson.
Cleary, Frederick Charles.....	Chillicothe.....	Livingston.
Cripps, David Andrew.....	Queen City.....	Schuyler.
Cunningham, Newton Corwin.....	Alton, <i>Ill.</i>	
Dempsey, Dudley LeRoy.....	Macon.....	Macon.
Drum, Edward Livingston.....	Marblehill.....	Bollinger.
Duggins, Ralph Hereford.....	Marshall.....	Saline.
Duncan, Frederic Austin.....	Columbia.....	Boone.
Feaster, Ross Elmer.....	Windsor.....	Henry.
Ferrell, Hosea Vise, Jr.....	Cartersville, <i>Ill.</i>	
Fisher, Eldon Jacob.....	Joplin.....	Jasper.
Foard, John Pender.....	Flatwoods.....	Ripley.
Frey, Lumley Hall.....	Denver, <i>Col.</i>	
Gallant, Charles Lewis.....	St. Louis City.....	
Gilker, James Abraham.....	Sedalia.....	Pettis.
Gillihan, Lewis Brosius.....	Gallatin.....	Daviess.
Gladish, Silas Lee.....	Millersville.....	Cape Girardeau.
Greathouse, Lawson Welser.....	West Salem, <i>Ill.</i>	
Grier, Ralph Waldo Emerson.....	Hemple.....	Clinton.
Hall, Ben Reynolds.....	Kansas City.....	Jackson.
Hamilton, Albert Prather.....	Orrick.....	Ray.
Hilpirt, Archie Luke.....	Mt. Vernon.....	Lawrence.
Hoar, Hobson.....	Rea.....	Andrew.
Hockensmith, Roy Abner.....	Columbia.....	Boone.
Houck, George, Jr.....	Bloomfield.....	Stoddard.
Hunter, Lewis Linn.....	Benton.....	Scott.
James, George.....	Lucerne.....	Putnam.
Jones, Edward Ross.....	Lamar.....	Barton.
Love, Royal Homer.....	Carrollton.....	Carroll.
Marlowe, Thomas Nelson.....	Norborne.....	Carroll.
Mavnard, John Lafayette.....	Mt. Vernon.....	Lawrence.
Miller, Franklin Julius.....	Chamois.....	Osage.
McBaine, James Patterson.....	Columbia.....	Boone.
McCaslin, Frank James.....	Columbia.....	Boone.
Neale, Benjamin Mayberry.....	Ernest.....	Dade.
Newton, Cleveland Alexander.....	Manes.....	Wright.
Palmer, Charles Paschal.....	Sturgeon.....	Boone.
Palmer, Joe Robert.....	Elsberry.....	Lincoln.
Parman, John.....	Lathrop.....	Clinton.
Peters, John Patrick.....	Vosholl.....	Osage.
Poston, Felix Oliver.....	Bonneterre.....	St. Francois.
Price, Perry Riley.....	Plattsburg.....	Clinton.

Name.	Postoffice.	County.
Robinson, Harry E.....	Appleton City.....	St. Clair.
Robinson, Roy D.....	Appleton City.....	St. Clair.
Robison, Berten Lee.....	Unionville.....	Putnam.
Rothwell, Wade Hampton.....	Ashland.....	Boone.
Saylor, Oliver Evans.....	St. Louis City.	
Schafer, Frederick Charles.....	Lancaster.....	Schuyler.
Sears, Charles Thatcher.....	Macon.....	Macon.
Shaw, Russell Aubrey.....	Columbia.....	Boone.
Simrall, Denny Coulter.....	Liberty.....	Clay.
Triplett, Charles Lane.....	Levasy.....	Jackson.
Violet, Dan Proctor.....	Chamois.....	Osage.
Wagner, Joseph Peter.....	Hardeman.....	Saline.
Walter, James Theodore.....	Meade, <i>Kan.</i>	
Walton, Stonewall Jackson.....	Troy.....	Lincoln.
Woodson, Thomas Poindexter.....	Louisiana.....	Pike.

First Year Class—Three Years' Course.

Anamosa, George Willis.....	Sedalia.....	Pettis.
Anderson, Ward.....	Jennings, <i>La.</i>	
Barry, Norman Clarke.....	Hampton, <i>Va.</i>	
Baskerville, Lucien Bertram.....	Appleton City.....	St. Clair.
Berry, James Eustace.....	Unionville.....	Putnam.
Betson, Roy Johnson.....	Linneus.....	Linn.
Blair, Charles Albert.....	Mound City.....	Holt.
Coleman, Hal R.....	Foristell.....	St. Charles.
Crowley, Claude Stephen.....	Larue, <i>Ohio.</i>	
Darneal, William Hubbell, Jr.....	Richmond.....	Ray.
Davis, Joseph Thomas.....	Berger.....	Franklin.
Doughty, John Alfred.....	Farmington.....	St. Francois.
Feemster, Elam Irwin.....	Porterville, <i>Cal.</i>	
Finley, Ralph Tilden.....	Greenfield.....	Dade.
Finney, Charles Elberding.....	Moberly.....	Randolph.
Freeze, Everett.....	Bona.....	Dade.
Fulton, Clarence Fleetwood.....	Patterson.....	Wayne.
Garner, Edward Bland.....	Hartville.....	Wright.
Hall, Morris VanErvie.....	Tarkio.....	Atchison.
Hamilton, Ralph Scott.....	East Palestine, <i>O.</i>	
Haw, Joseph Lindsay, Jr.....	Farmington.....	St. Francois.
Henwood, Berryman.....	Oakwood.....	Marion.
Hicks, Virgil.....	Boles, <i>Ky.</i>	
Ingalls, Thomas Garfield.....	Lowell, <i>Mass.</i>	
Jeffress, Edna Florence.....	Edwardsville, <i>Ill.</i>	
Jones, Loren Gilmore.....	Slagle.....	Polk.
Kahn, Jesse Jacob.....	Bigelow.....	Holt.
Kelso, Edward.....	Grant City.....	Worth.
Kenton, Joseph Wheeler.....	Norborne.....	Carroll.
Landon, James E.....	Marshall.....	Saline.
Lindsay, Thomas Taylor.....	Charleston.....	Mississippi.
Mahn, Ed. Conrad.....	East Bonnetterre.....	St. Francois.
Martin, William Henry.....	St. Joseph.....	Buchanan.
Mullins, Roscoe Conkling.....	Linneus.....	Linn.
Murrell, George Clarence.....	Hartville.....	Wright.
McConnell, Rufus Ward.....	Greenfield.....	Dade.
Napton, John Reid.....	Marshall.....	Saline.
Pearcy, Elmer Egerton.....	Thornfield.....	Ozark.
Price, Robert Beverly, Jr.....	Columbia.....	Boone.
Robinson, Thomas Wright.....	Macon.....	Macon.
Romjue, Milton Andrew.....	Lovelake.....	Macon.
Rose, Marion Amos.....	Benton, <i>Ill.</i>	
Rucker, Alvin, Jr.....	Farmington.....	St. Francois.
Rule, Ernest Mahlon.....	Nashua.....	Clay.
Rundle, Christopher Orlando.....	Burlington Junct'n.....	Nodaway.
Sawyer, William Gaston.....	Maryville.....	Nodaway.
Schuermeier, William Frederick.....	St. Louis City.	
Schulze, Fred William J.....	Vandalia.....	Audrain.

Name.	Postoffice.	County.
Silverman, Eugene	St. Joseph.....	Buchanan.
Stafford, Nean	Buffalo	Dallas.
Storm, Fred Erwin	Maryville.....	Nodaway.
Summerville, Robert Oscar	Chillicothe	Livingston.
Thompson, Frank Abner, Jr.....	St. Louis City.	
Thurman, Harold Clarke.....	Lamar.....	Barton.
Varney, John Alexander.....	Paris	Monroe.
Whitehill, Hibbard Chartrand.....	St. Louis City.	
Williams, Curtis	Spring Garden, <i>Ill.</i>	
Williamson, John Robert	New Hampton....	Harrison.
Wilson, Harry Edward.....	East Palestine, <i>O.</i>	
Wulff, Hans Jacob	St. Louis City.	
<i>Special Students.</i>		-60
Bottom, Claude Bernard.....	Breckenridge.....	Caldwell.
Edwards, Charles Henry.....	Turley.	Texas.
Hoag, Wilbur Elery.....	Mountain Grove..	Wright.
Kautz, Leslie Ross.	Hamilton	Caldwell.
Kimberlin, George Pulliam.....	Dayton	Cass.
Marshall, Thomas Francis.....	Columbia.....	Boone.
Miller, William Louis.....	Macon	Macon.
Roberts, Roy Edward.....	Canton	Lewis.
Wallace, William Oren.....	East Palestine, <i>O.</i>	
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Medical Department,

Name.	Postoffice.	County.
<i>Graduate.</i>		
Guthrie, Charles Claude.....	Columbia	Boone.
Turner, William Henry	Centralia	Boone.
<i>Third Year Class.</i>		-2
Baker, Karl Edgar.....	Carthage	Jasper.
Bedford, Stephen Vincent.....	Columbia.....	Boone.
Cole, William Marvin.....	Sedalia	Pettis.
Crockett, James Adderson.....	Stanberry	Gentry.
Draper, Neal McClain.....	Columbia.....	Boone.
Freudenberger, Henry Clay.....	Clarksburg	Moniteau.
Johnson, Carroll Allen	Columbia.....	Boone.
Kaps, Frederick Otto.....	Oshkosh, <i>Wisc.</i>	
Moore, Thornton Easley.....	Edinburg.....	Grundy.
Nichols, Arlee Isbell	Ashland	Boone.
O'Mahoney, Lafayette.....	Columbia.....	Boone.
Payne, Harry Claucet.....	Paris	Monroe.
Potter, Peter.	Columbia.....	Boone.
Walker, John C.	Neosho	Newton.
<i>Second Year Class.</i>		-14
Adams, Wilson Roy.....	Linneus	Linn.
Bardwell, Walter S.....	Tunkhannock, <i>Pa.</i>	
Bell, Elexious Thompson.....	Hatch	Ralls.
Brunner, Ethan Edward.....	Krumsville, <i>Pa.</i>	
Campbell, Albert James.....	Clinton	Henry.
Clark, Chester Harlan.....	Beloit, <i>Wis.</i>	
Coe, Urling Campbell.....	Carthage	Jasper.
Colley, Elijah Augustus	Plattsburg.....	Clinton.

Name.	Postoffice.	County.
Collins, William White.....	Danville, <i>Ill.</i>	
Cooper, Joseph Quintus	Columbia.....	Boone.
Cowgill, Eugene Park	Oak Valley, <i>Kan.</i>	
Dod, Frederick Leslie.....	Greenwood.....	Jackson.
Ferrell, Barney.....	Cartersville, <i>Ill.</i>	
Haas, Harry R.....	Hills Grove, <i>Pa.</i>	
Miller, Robert Mayberry.....	Sugartree	Carroll.
McMurtry, Milton Scott.....	Oklahoma City, <i>Ok.</i>	
Rayl, John Edward.....	Crocker	Pulaski.
Scholz, Grace Lillian.....	St. Louis City.	
Strode, Robert Caldwell.....	New London	Ralls.
Talbot, Charles Albert.....	Easton	Buchanan.
Titsworth, Guy.....	Sedalia	Pettis.
Weeks, William Brinson.....	Pittsburg, <i>Kan.</i>	
Willier, Albert Francis.....	Springfield	Greene.
Wilson, Harold Kenneth.....	Lewistown, <i>Mont.</i>	
Woods, William Perry.....	Clarinda, <i>Iowa.</i>	

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First Year Class.

Albright, Clifton C.....	West Shelley, <i>N. Y.</i>	
Antonowsky, Benjamin.....	New York, <i>N. Y.</i>	
Atkinson, Shelby.....	Ruston, <i>La.</i>	
Bennett, William Floyd.....	Elwood	Greene.
Brown, Charles Arthur.....	Kansas City.....	Jackson.
Butman, William Charles.....	Macon.....	Macon.
Caffee, Charlie Eugene.....	Vernona, <i>Miss.</i>	
Campbell, Samuel Kelly.....	Warrensburg.....	Johnson.
Cleveland, Mary Gertrude.....	Brookfield	Linn.
Cordonier, Alfred Edward.....	Wathena, <i>Kan.</i>	
Curtwright, Fred Caplinger.....	Paris	Monroe.
Davis, Owen Bartholomew.....	Boonville.....	Cooper.
Dewey, Fred Girard.....	Moville, <i>Iowa.</i>	
Dudley, Charles A.....	Trenton	Grundy.
Eilery, William Linton.....	LaGrange	Lewis.
Fletcher, John.....	Trinidad, <i>Col.</i>	
Gardner, Phonrose Lewis.....	Trenton	Grundy.
Gullion, Omar Ray.....	Emerson	Marion.
Hawkins, George Giles.....	Paris	Monroe.
Jeffreys, Oliver Anderson.....	Weiser, <i>Idaho.</i>	
Kistler, Herbert Daniel.....	Clinton.....	Henry.
Klass, Oscar Charles.....	Columbia.....	Boone.
Long, Andrew.....	St. Joseph.....	Buchanan.
Lukens, Lester W.....	Oskaloosa, <i>Iowa.</i>	
Miller, John Frederick.....	Olivet, <i>S. Dak.</i>	
Montgomery, Charles Francis.....	Greenfield.....	Dade.
McAlester, Andrew Walker, Jr.	Columbia.....	Boone.
McCurdy, Edgar Henry.....	Clinton, <i>Mass.</i>	
Nelson, James Everett.....	Volant, <i>Pa.</i>	
Osborn, Frank Pitman.....	Gomez	Shannon.
Owsley, Harvey Betterton.....	Pemberville, <i>Ohio.</i>	
Payne, Orion LeRoy.....	Paris	Monroe.
Pilger, Walter	Norfolk, <i>Neb.</i>	
Rieger, George Livingston.....	Kirksville	Adair.
Rudolph, Don.....	St. Louis City.	
Rush, Louis	Evansville, <i>Ind.</i>	
Santiago, Jose Manuel.....	Dorads, <i>Porto Rico.</i>	
Seitz, William Kerlin.....	Unionville.....	Putnam.
Singleton, Dennis Edward.....	Paris	Monroe.
Taake, Edmund Felix.....	Florissant	St. Louis.
Thompson, Robert Clair.....	Irvine, <i>Pa.</i>	
Thompson, Richard Samuel.....	Greencreek, <i>Idaho.</i>	
Williams, David Edgar Allen Poe	Conway	Laclede.
Woodside, Edward Everett.....	Creal Springs, <i>Ill.</i>	

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Name.	Postoffice.	County.
<i>Special Students.</i>		
Dunaway, Janie English.....	Caplinger Mills....	Cedar.
Henderson, William Terry.....	Ruston, La.	
Kampschmidt, August William.....	Cedarfork.	Franklin.
Rogers, Frank Washington.....	Moral, Okla.	
Schweitzer, Henry George.....	New York, N. Y.	

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College of Agriculture and Mechanic Arts.

A. SCHOOL OF AGRICULTURE.

Name.	Postoffice.	County.
<i>Graduate Class.</i>		
Howard, Walter Lafayette, B. Ag., B.S. in Agr.	Griffin	Christian
Willoughby, Claude Leake, B. Agr.....	Columbia.	Boone.
<i>Senior Class.</i>		
Frampton, Alfred Clement.....	Normandy.....	St. Louis.
Hoag, William Bert	Mountain Grove..	Wright.
Jackson, Caroline Ruth	Chillicothe..	Livingston.
Parkhurst, Albert Early.....	Sweet Springs....	Saline.
<i>Junior Class.</i>		
Crouch, Andrew Monroe, Jr.	Columbia.	Boone.
Doughty, Job Marcus.....	Farmington	St. Francois.
Jesse, William Hall, Jr.....	Litwalton, Va.	
Krafft, Walter Mitchell.....	Farmington.....	St. Francois.
Moree, Edward Emanuel.	Baker	St. Clair.
Rhodes, Edward Dean.....	Webster Groves ..	St. Louis.
<i>Sophomore Class.</i>		
Bradley, Harry Everett.....	St. Louis City.	
Browning, Homer Francis.....	Fairfax.	Atchison.
Douglass, James Mott, Jr.....	Senath	Dunklin.
Gale, Henry Lee.....	Fredericktown....	Madison.
Hancock, Charles Homer	Bosworth.....	Carroll.
Harvey, William Thomas.....	Prairie Hill.....	Chariton.
Hoecker, Charles Henry	St. Louis City.	
Laeuffert, Walter Fred.....	St. Louis City.	
Price, James Newton.....	Trenton	Grundy.
Rouse, Birdie Laforce.....	Browns Station....	Boone.
Thieman, Lewis William.....	Aullville.....	Lafayette.
<i>Freshman Class.</i>		
Fallenger, William White.....	McBaine	Boone.
Bennett, John Edward.....	Sullivan	Franklin.
Bottomf, Bert Garfield.....	Monroe City	Monroe.
Chandler, William Henry.....	Foster	Bates.
Cline, Lewis Edgar	Trenton	Grundy.
Cottier, Hugh Montgomery.....	Skidmore	Nodaway.
Cunningham, Mattie Montgomery.....	Columbia	Boone.
Curtright, Fred Caplinger.....	Paris.....	Monroe.
Duke, David Edward	Houston.....	Texas.
Greene, Homer Cooper	Ireland, Ind.	

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Name.	Postoffice.	County.
Hardesty, James Carleton.....	Weston.....	Platte.
Hill, John Benjamin.....	Columbia.....	Boone.
Hurst, Walter.....	Kansas City.....	Jackson.
Lowry, Katherine.....	Rockville.....	Bates.
MacCabe, Richard Steve.....	Springfield.....	Greene.
Mattox, Harry Lee.....	Sullivan.....	Franklin.
Oliver, Charles Clay.....	Leemon.....	Cape Girardeau.
Schlie, Enrique.....	Santa Fe, <i>Arg. Rep.</i>	
Scott, William Thomson.....	Columbia.....	Boone.
Standley, William May.....	Carrollton.....	Carroll.
Tietjens, Otto.....	Slater.....	Saline.
Vera, Joseph M.....	Santa Fe, <i>Arg. Rep.</i>	
Woolsey, Calvin Lee.....	Braymer.....	Caldwell.
<i>Special Students</i>		
Fristoe, Allen D.....	Palo Pinto.....	Benton.
Gates, Daniel Taylor.....	Montrose.....	Henry.
Glascok, Etta Gentry.....	Hannibal.....	Marion.
Griffith, Hubert Harvey.....	Columbia.....	Boone.
Jackson, Pearl Eliza.....	Chillicothe.....	Livingston.
Kelso, Floyd Lee.....	Willard.....	Greene.
Lloyd, Roy Churchels.....	Columbia.....	Boone.
Maynard, Mrs. Julia B.....	Mt. Vernon.....	Lawrence.
Roberts, Laura Belle.....	Columbia.....	Boone.
Steel, Howard.....	LaForge.....	New Madrid.
Summers, Melvin Burdelle.....	Louisville, <i>Ohio.</i>	
Trimble, Margaret Allen.....	Columbia.....	Boone.
Turner, Mrs. Cynthia Gentry.....	Columbia.....	Boone.

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Short Winter Course in Agriculture and Horticulture.

(Agr=Agriculture, H=Horticulture, D=Dairying.)

Name.	Course.	Postoffice.	County.
Adams, John Alpha.....	Agr.	Bristleridge.....	Johnson.
Bennett, Andrew.....	Agr.	Empire Prairie... ..	Andrew.
Brazelton, John Jr.....	H.	Wathena, <i>Kans.</i>	
Browning, Clarence Carl.....	Agr.	Appleton City.....	St. Clair.
Bryant, Harry Elmer.....	Ag.	Macedonia, <i>Iowa.</i>	
Carter, LeRoy.....	Agr.	Wathena, <i>Kans.</i>	
Cassidy, John Luke.....	Agr.	Arlington, <i>Ill.</i>	
Conley, William Turner.....	Agr.	Frankfort, <i>Ky.</i>	
Dewalt, William Fair.....	D.	Cameron.....	Clinton.
Gibson, Reuben Milton.....	H.	Columbia.....	Boone.
Gibson, William David.....	H.	Columbia.....	Boone.
Hamilton, George William.....	Agr.	Fulton.....	Callaway.
Handly, Arch Walkup.....	Agr.	Metz.....	Vernon.
Henderson, William Stuart.....	Agr.	Jackson.....	Cape Girardeau.
Kasper, Charles.....	Agr.	Braymer.....	Caldwell.
Kelso, Del.....	Agr.	Laredo.....	Grundy.
LaRowe, John Cendor.....	D.	Valley Park.....	St. Louis.
Loomis, Edward A.....	Agr.	Meadville.....	Linn.
Lucky, Page.....	Agr.	Longtown.....	Perry.
Marbut, Edward Ethel.....	Agr.	McDowell.....	Barry.
Matthews, David Boggs.....	D.	Kirksville.....	Adair.
Meeker, David.....	Agr.	Birch Tree.....	Shannon.
Mereness, George H.....	Agr.	Liberty.....	Clay.
Mereness, Roy Garland.....	Agr.	Liberty.....	Clay.
McCutchen, Walker William.....	Agr.	Campbell.....	Dunklin.

Name.	Course.	Postoffice.	County.
McDonald, Philip Colman.....	D.	Princeton.....	Mercer.
Philbrick, Daniel Eastman.....	Agr.	Rich Hill.....	Bates.
Schindler, Wendelin Marion.....	Agr.	Perryville.....	Perry.
Schubert, Walter Lenard.....	Agr.	Rockport.....	Atchison.
Swan, Arthur Lovell.....	Agr.	Marceline.....	Linn.
Vandiver, Thomas Clark.....	D.	Columbia.....	Boone.
Walsh, William.....	Agr.	Godfrey, <i>Ill.</i>	
Williams, Rodney Lewis.....	H.	Gravel Point.....	Texas.
Winzenburg, Henry.....	Agr.	Sedalia.....	Pettis.

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C. School of Mechanic Arts.

Name.	Postoffice.	County.
<i>Senior Class.</i>		
Meriwether, Frank Edwin.....	Aberdeen.....	Pike.
Shepherd, Frank Youse.....	Hannibal.....	Marion.
<i>Junior Class.</i>		
Hemphill, Joseph Arthur.....	Elsberry.....	Lincoln.
Krumm, Henry Alexander.....	Pilot Grove.....	Cooper.
Wellman, William Thomas.....	Masonville, <i>Ky.</i>	
<i>Sophomore Class.</i>		
Cavanagh, Daniel Joseph.....	St. Charles.....	St. Charles.
Collier, Thomas.....	Mokane.....	Callaway.
Dugan, Edward Isaac.....	Montrose.....	Henry.
Hayes Minnie Robert.....	Columbia.....	Boone.
Helm, Herschel Horace.....	Morgantown, <i>Ky.</i>	
Lindsey, Parren Durwood.....	Ashland.....	Boone.
Simmons, Emma Gertrude.....	Berryville, <i>Ark.</i>	
Wally, Joseph Henry.....	Montrose.....	Henry.
Withall, Frank C.....	St. Louis City.	
<i>Freshman Class.</i>		
Alexander, Phil. Thomas.....	Farmington.....	St. Francois.
Alsop, Birch Hunt.....	New Franklin.....	Howard.
Bonfoey, Lawrence Powers.....	Unionville.....	Putnam.
Breckenridge, Robert James.....	Savannah.....	Andrew.
Brill, John Pierce.....	Lincoln.....	Benton.
Brown, Thomas Claude.....	Edina.....	Knox.
Burrell, Harry Mark.....	Moberly.....	Randolph.
Dalby, John Roy.....	Sedalia.....	Pettis.
Dinkle, Ernest.....	Hilldale.....	Howard.
Dresser, Lee Frank.....	Platte City.....	Platte.
Dunn, Charles Clyde.....	Hartwell.....	Henry.
Estill, Clifton Rodes.....	Estill.....	Howard.
Goodson, John Virgil.....	New Cambria.....	Macon.
Griffith, Florence Fisher.....	Columbia.....	Boone.
Harrison, Carl.....	Mexico.....	Audrain.
Hoff, Carl Porter.....	Stockton.....	Cedar.
Lloyd, Frank Dimmitt.....	Columbia.....	Boone.
Marshall, Lynn Edward.....	Sikeston.....	Scott.
Martin, John Wesley.....	Pawnee, <i>Ill.</i>	
Maupin, Oval Asbury.....	Canton.....	Lewis.
Pulliam, Susie.....	Deer Park.....	Boone.
Ross, Floyd Elmer.....	Willard.....	Greene.

Name.	Postoffice.	County.
Russell, Clifford Norman.....	Normandy.....	St. Louis.
Shepherd, Clarence	Hardin	Ray.
Smith, William Forrest.....	Clatskanie, <i>Oregon</i> .	
Sparks, Arthur Lee.....	Shelbina.....	Shelby.
Stader, James Aquilla.....	Newtonia.....	Newton.
Thompson, James Loyd.....	Roswell, <i>N. M.</i>	
Torrance, Bert Victor.....	Fredonia, <i>N. Y.</i>	
<i>Special Students.</i>		—29
Bayless, Earle Granthem.....	Cassville.....	Barry.
Clifton, William Ransom.....	Crosstown.....	Perry.
Fisher, Julia Gamble.....	Columbia.....	Boone.
Luckey, Dennis Armstrong.....	Longtown.....	Perry.
McDaniel, John Samuel.....	Houstonia.....	Pettis.
Porter, Mary Estelle.....	Columbia.....	Boone.
Sellers, Reuben Frank.....	Lamonte.....	Pettis.
Varney, John Alexander.....	Paris.....	Monroe.
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Household Economics.

Name.	Postoffice.	County.
Bassett, Vinnie.....	Paris.....	Monroe.
Breckenridge, Minnie Adell.....	Ogdensburg, <i>N. Y.</i>	
Davidson, Hope Lorimer.....	Des Moines, <i>Iowa</i> .	
Fleming, Annie Laurie.....	Columbia.....	Boone.
Gerig, Rosalie.....	Columbia.....	Boone.
Gerould, Harriet Dupee.....	Hollis, <i>N. H.</i>	
Glass, Etta Gentry.....	Hannibal.....	Marion.
Gordon, Clara Lisle.....	Columbia.....	Boone.
Gordon, Sadie Long.....	Columbia.....	Boone.
Gwinn, Mrs. Ellis.....	Joplin.....	Jasper.
Hamilton, Goldy Mitchell.....	Dwight, <i>Ill.</i>	
Harris, Anna Leigh.....	Webster Groves.....	St. Louis.
Huggins, Augusta Jane.....	Shawnee, <i>Okla.</i>	
Hutton, Maggie.....	Garden City.....	Cass.
Jackson, Eliza Lucile.....	Martintown.....	Putnam.
Jackson, Alfa Jane.....	Chillicothe.....	Livingston.
Johnson, Grace G.....	Hamilton.....	Caldwell.
Koch, Clara May Barbara.....	LaGrange.....	Lewis.
Luthy, Luella Woodford.....	Parkville.....	Platte.
Marsh, Annie Elizabeth.....	Columbia.....	Boone.
Moss, Katherine.....	Paris.....	Monroe.
Ramsey, Mrs. Clara S.....	Columbia.....	Boone.
Schlierholz, Flora Mary.....	St. Louis City.....	
Turner, Mrs. Cynthia Gentry.....	Columbia.....	Boone.
Winslow, Isabella Austin.....	Kansas City.....	Jackson.
Zimmerman, Alice.....	Sedalia.....	Pettis.
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D. School of Engineering.

Name.	Course.	Postoffice.	County.
<i>Graduate Class.</i>			
Blackwell, Paul Alexander, B. S. in C. E.	C. E.	Canonsburg, Pa.	
Hodge, Robert Walter, E. E.	E. E.	Kansas City.....	Jackson.
Lyman, Forest Shepard, B. S. in E. E.	E. E.	Kansas City	Jackson.
Pinkley, Roy Henry, B. S. in E. E.	E. E.	Chillicothe	Livingston.
Raffner, Charles Shumway, B. S. in E. E.	E. E.	Palmyra.....	Marion.
Shepard, Edward Lewis, B. S. in C. E.	C. E.	Joplin	Jasper.
Underhill, Dillen, M. E.	M. E.	Mt. Vernon, Ohio.	
<i>Senior Class.</i>			
Brundige, John Alvin.	M. E.	Adrian	Bates.
Don Carlos, Henry Carter.....	E. E.	Clarksburg	Moniteau.
Houx, Samuel Bailey.....	C. E.	Warrensburg...	Johnson.
MacLay, Edgar Gleim.....	C. E.	Tipton	Moniteau.
Morehead, George Lawrence.....	M. E.	Columbia.....	Boone.
Nicholson, Lloyd Carlton.....	E. E.	Richlands, N. C.	
Pierce, Lonnie John.....	E. E.	Rockport.....	Atchison.
Rautenstrauch, Walter.....	M. E.	Sedalia	Pettis.
Robertson, Gay Aufricht.	M. E.	Gallatin	Daviess.
Salmon, John McClure.....	C. E.	Shawnee, Okla.	
Smith, Earl Brenton.....	M. E.	Altoona, Iowa.	
Wilcox, Frank Leslie.....	C. E.	Columbia.....	Boone.
Williams, Thomas Albert.....	C. E.	Moberly.....	Randolph.
Wood, Charles Wayne.....	C. E.	Boles.....	Franklin.
<i>Junior Class.</i>			
Barrett, Arthur.....	C. E.	Elwood.....	Greene.
Brandenburger, Leo.....	E. E.	Chillicothe . . .	Livingston.
Brinkley, Milo Hamilton.....	C. E.	Linneus	Linn.
Briscoe, Edward Andrew.....	E. E.	Tipton	Moniteau.
Clegg, Philip.....	M. E.	New Orleans, La.	
Cochel, Robert Calvin.....	C. E.	Columbia.....	Boone.
Craig, Thomas J.....	M. E.	Lebanon	Laclede.
Ellis, John Richard.....	C. E.	Pilot Grove.	Cooper.
Fessenden, Edwin Allan.....	M. E.	St. Louis City.	
Gordon, Robert.....	E. E.	Idlewild, N. Y.	
Hammack, James Albert.....	C. E.	Pocahontas, Miss.	
Harris, William Woodson.....	C. E.	Rich Hill.....	Bates.
Hax, George Ludwig, Jr.	C. E.	Kansas City.....	Jackson.
Hook, James Arthur.....	E. E.	Columbia.....	Boone.
Hunter, Thomas Edwin.....	C. E.	Raytown	Jackson.
Jackson, Charles Thomas.....	C. E.	Miami	Saline.
Kilburn, Francis Herbert.....	M. E.	Carthage	Jasper.
Kleinschmidt, Henry Schwing...	C. E.	St. Louis City.	
Knabe, Albert.....	M. E.	St. Louis City.	
Lushbaugh, Erith Evert.....	C. E.	Columbia.	Boone.
Magruder, Frank Cecil.....	C. E.	Carthage.	Jasper.
McCoy, Wilson Frazer.....	C. E.	Mound City	Holt.
Perry, Thomas Benton	C. E.	Carthage.	Jasper.
Rice, DeWitt Talmage.....	M. E.	Kearney	Clay.
Ringer, Charles Rufus.....	E. E.	Edina	Knox.
Robinson, Ernest Franklin	C. E.	Lamar.....	Barton.
Rollins, William Benjamin.....	M. E.	Kearney	Clay.
Sansom, Frank W.....	C. E.	Joplin	Jasper.
Shepherd, George Shields.....	M. E.	Hannibal.....	Marion.
Smith, William Ernest.....	C. E.	Webb City.. ...	Jasper.

Name.	Course.	Postoffice.	County.
Stewart, Burns.....	E. E.	Chillicothe	Livingston.
Stone, Virgil Birton.....	E. E.	Chillicothe	Livingston.
Vaughan, Richard.....	E. E.	Lexington	Lafayette.
Washer, Charles.....	E. E.	Kansas City.....	Jackson.
Welch, Austin Hubbard.....	M. E.	Columbia.....	Boone.
Zorn, Edward.....	C. E.	West Plains	Howell.
<i>Sophomore Class.</i>			
Barast, Milton.....	E. E.	Perry, <i>Okla.</i>	
Barnes, Albert Fenton.....	C. E.	St. Joseph	Buchanan.
Baxter, John James.....	C. E.	Moberly	Randolph.
Brown, George Anthony.....	C. E.	Hannibal	Marion.
Cannell, Arthur.....	E. E.	Hatton	Callaway.
Carroll, Stephen Samuel	C. E.	Hutchison	Ralls.
Cason, Everett Shackelford	E. E.	Carrollton	Carroll.
Chandlee, Joseph Matthews.....	E. E.	Jonesburg	Montgomery.
Coleman, William Tyler.....	C. E.	Monarch	St. Louis.
Constance, Edward Cartwright.....	C. E.	High Hill.....	Montgomery.
Cunningham, George Alkmaar.....	C. E.	Indiana, <i>Pa.</i>	
Davis, Ernest Anson.....	E. E.	Sedalia	Pettis.
Denny, Omer.....	M. E.	Kearney	Clay.
Denny, Earl.....	M. E.	Kearney	Clay.
Fitzen, Arthur Robert.....	C. E.	Boonville.....	Cooper.
Espenschied, Frederic Fairfax.....	E. E.	St. Louis City.	
Fisher, Wilbur Howard.....	C. E.	Hannibal	Marion.
Funk, Frank.....	C. E.	Webb City.....	Jasper.
Garey, Elmer	C. E.	Joplin	Jasper.
Glascock, Henry Hopson.....	E. E.	Hannibal	Marion.
Hall, Delmer Kenneth.....	C. E.	Harrisonville	Cass.
Hamilton, James Lemmon.....	E. E.	Wishart	Polk.
Hann, George Washington.....	C. E.	Columbia	Boone.
Harrison, Isaac Fletcher	M. E.	Bethany	Harrison.
Hess, Monroe M.....	E. E.	Kahoka.....	Clark.
Hilder, Frazer Crowell.....	C. E.	Washington, <i>D. C.</i>	
Houston, George Richard.....	E. E.	Stanberry	Gentry.
Jacobs, David.....	C. E.	Columbia	Boone.
Johnson, Luther Elman.....	E. E.	Nevada.....	Vernon.
Kendall, Harry Cole	E. E.	Kirkwood	St. Louis.
Kirk, Todd.....	C. E.	Kirkville	Adair.
Knight, Frank Robert.....	E. E.	Charleston, <i>Iowa.</i>	
Koken, Walter Frank.....	M. E.	St. Louis City.	
Linthacum, Jesse Asberry.....	M. E.	Ridgeway	Harrison.
Loucks, Samuel G.....	M. E.	Mound City.....	Holt.
Macfarlane, Guy O'Rear.....	E. E.	Mexico	Audrain.
Malsbury, Omer Elmer.....	C. E.	Joplin	Jasper.
Maupin, Edgar Staples.....	C. E.	Canton	Lewis.
Meister, James Franklin.....	E. E.	Kansas City.....	Jackson.
Morehead, French Hugh.....	M. E.	Columbia.....	Boone.
Moss, Robert Faulkner.....	C. E.	Columbia.....	Boone.
Penter, Eli Everett.....	E. E.	Ashland	Boone.
Riesbol, Edward.....	C. E.	Redbird	Gasconade.
Robinson, Charles C.....	E. E.	Trenton	Grundy.
Rubio, Oswaldo	M. E.	Puerto Principe,	<i>Cuba.</i>
Schultz, Charles.....	C. E.	Hannibal	Marion.
Shikles, James Wallace.....	C. E.	Lathrop	Clinton.
Smothers, Ira Page.....	C. E.	Moberly	Randolph.
Spalding, Walter James.....	C. E.	Moselle.....	Franklin.
Swartz, Frederick Peter.....	C. E.	Joplin	Jasper.
Tomlinson, Erwin Mortimer.....	E. E.	Centralia	Boone.
Westover, Harvey Christopher.....	C. E.	St. Joseph.....	Buchanan.
Wharton, James Roy.....	M. E.	Columbia.....	Boone.
White, Robert C.....	C. E.	Bertrand	Mississippi.
Williams, Charles Hardin.....	M. E.	Mexico	Audrain.
Wilson, John Thomas.....	C. E.	Milton, <i>Iowa.</i>	

Name.	Course.	Postoffice.	County.
<i>Freshman Class.</i>			
Albright, Peter Hubert.....	C. E.	Lamar.....	Barton.
Alder, Joseph D.....	C. E.	Mosby.....	Clay.
Archer, Elmer Thee.....	E. E.	Little Rock, <i>Ark.</i>	
Barnes, James Harry.....	E. E.	Aullville.....	Lafayette.
Birney, Abner Cassidy.....	E. E.	Ottumwa, <i>Iowa.</i>	
Blake, John Albert.....	C. E.	Cheshire, <i>N. H.</i>	
Bonfoey, Percy Webb.....	E. E.	Unionville.....	Putnam.
Booth, William Lawrence.....	M. E.	Larned, <i>Kas.</i>	
Brack, Gottlieb Sterling.....	E. E.	Little Rock, <i>Ark.</i>	
Brack, Elbert Otto.....	E. E.	Little Rock, <i>Ark.</i>	
Broadbuss, Jesse Norris.....	C. E.	St. Joseph.....	Buchanan.
Brown, Thomas Claude.....	C. E.	Edina.....	Knox.
Buckham, John Edwin.....	E. E.	Rockport.....	Atchison.
Cargill, Raymond Luther.....	E. E.	St. Joseph.....	Buchanan.
Carr, Walter Copeland.....	E. E.	Wellington, <i>Kan.</i>	
Carter, Edward Glanville.....	E. E.	Kirkwood.....	St. Louis.
Chambers, Harvey Chinn.....	E. E.	Mound City.....	Holt.
Chinn, Charles Raleigh, Jr.....	C. E.	Webb City.....	Jasper.
Clifton, Charles Mynton.....	E. E.	Brookfield.....	Linn.
Cloud, Wendell Holmes.....	E. E.	Kansas City.....	Jackson.
Coe, Denzell Worrell.....	C. E.	Carthage.....	Jasper.
Cowherd, Clyde Estis.....	C. E.	Columbia.....	Boone.
Davis, John Piper.....	C. E.	Windsor.....	Henry.
Diehl, Harry Everett.....	E. E.	Clinton.....	Henry.
Dobson, Gilbert.....	C. E.	Philadelphia, <i>Pa.</i>	
Dudley, Wray E.....	E. E.	Troy.....	Lincoln.
Duncan, Dorsey Berry.....	C. E.	Columbia.....	Boone.
Eby, John North.....	C. E.	DeSoto.....	Jefferson.
Fairley, Ohmer.....	C. E.	Princeton.....	Mercer.
Faris, Clyde Homer.....	M. E.	Carrollton.....	Carroll.
Floyd, William Harris III.....	E. E.	St. Joseph.....	Buchanan.
Haggard, Homer Huston.....	C. E.	Mexico.....	Audrain.
Harrison, Nelson Burr.....	M. E.	Bethany.....	Harrison.
Hoffmann, Hopson Mountjoy.....	M. E.	Columbia.....	Boone.
Huddle, David Franklin, Jr.....	E. E.	Pineville, <i>La.</i>	
Huntsman, Frank C.....	C. E.	Macon.....	Macon.
Keeler, John Patrick.....	C. E.	Maryville.....	Nodaway.
Kidd, James Franklin.....	E. E.	Sedalia.....	Pettis.
Kreutz, Louis Bertram.....	C. E.	Columbia.....	Boone.
Lack, Charles Frederick.....	M. E.	Mobile, <i>Ala.</i>	
Laird, Norman Ketrone.....	C. E.	Vandalia.....	Audrain.
Liepsner, Frank Wright.....	C. E.	Kansas City.....	Jackson.
Locke, Robert Hodge.....	C. E.	Lock Springs.....	Daviess.
Maddox, Edward Morton.....	E. E.	New London.....	Ralls.
Malsbury, Charles Aaron.....	C. E.	Joplin.....	Jasper.
Martin, Charles W.....	C. E.	Troy.....	Lincoln.
McCartney, Walter Warren.....	E. E.	Rockport.....	Atchison.
McKenzie, Alexander Daniel.....	E. E.	St. Louis City.....	
Olshausen, William Herbert.....	E. E.	St. Louis City.....	
Peterman, Harry Richmond.....	C. E.	St. Joseph.....	Buchanan.
Powell, Maurice Vernon.....	C. E.	Odessa.....	Lafayette.
Powell, Charles Albert.....	E. E.	Macon.....	Macon.
Rcdman, James Elden.....	E. E.	Marshall.....	Saline.
Ross, Lewis James.....	C. E.	Richmond.....	Ray.
Schooler, William Allen.....	M. E.	Carthage.....	Jasper.
Sea, LeRoi Christopher.....	C. E.	Independence.....	Jackson.
Smith, Orville Anderson.....	C. E.	Vandalia.....	Audrain.
Tartar, Laban Moore.....	E. E.	Carbon Center.....	Vernon.
Thomson, Lucian Lamar.....	E. E.	Slater.....	Saline.
Vaughan, Courtney Richard.....	C. E.	Butler.....	Bates.
Washer, Eb.....	M. E.	Kansas City.....	Jackson.
Webster, Carl Day.....	C. E.	Savannah.....	Andrew.
Weed, James Murray.....	E. E.	Canon City, <i>Colo.</i>	
Welch, James Reid.....	C. E.	Elsberry.....	Lincoln.

Name.	Course.	Postoffice.	County.
Whaley, George Clifton.....	M. E.	Mexico	Audrain.
Woods, John Bushong.....	C. E.	East Palestine, O.	
Yant, George Stoody.....	C. E.	Keokuk, Iowa.	
<i>Special Students.</i>			
Crowell, Douglass C.	M. E.	Kansas City.....	Jackson.
Russell, Robert William.....	C. E.	Cameron	Clinton.
Shurts, Clarence Leone.....	E. E.	Mason, Ohio.	Lincoln.
Smiley, George Barton.....	C. E.	Whiteside.	

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School of Mines.

Name.	Course.	Postoffice.
<i>Graduates.</i>		
Buckby, DeNard Wilson....	B. S. in E. M., Class '01.	Philadelphia, Pa.
Buskett, Evans Walker	B. S. in E. M., Class '95.	Rolla, Mo.
Cowles, Frederick Ragland ..	B. S. in G. S., Class '01.	Kansas City, Mo.
Draper, James Clark	B. S. in E. M., Class '01.	Lebanon, Mo.
Fernandez, Abr'm Leonardo.	B. S. in E. M., Class '00.	Monterey, Mexico.
Garrett, Leon Ellis.....	B. S. in G. S., Class '01.	Maryville, Mo.
Olmsted, George Lewis.....	B. S. in C. & M., Class '01.	Granite City, Ill.
Perkins, Edwin Thompson...	B. S. in E. M., Class '99.	Kansas City, Mo.
Schulze, Herman Otto.....	B. S. in E. M., Class '99.	Rolla, Mo.
Terrell, Arthur Davis.....	B. S. in E. M., Class '98.	Iola, Kan.
Underwood, Jerrold Roscoe..	B. S. in C. & M., Class '99.	Granby, Mo.
<i>Seniors.</i>		
Daily, Cornelius Mark.....	.....	Rolla, Mo.
Fay, Albert Hill .....	.....	Bisbee, Arizona.
Greendige, Samuel Marshall..	.....	Barbadoes, West Ind.
Lyman, George Edwin.	A. B. (Drury College).	Springfield, Mo.
Mortinez, Carlos Efen.....	.....	Saltillo, Mexico.
May, Lawrence .....	.....	Memphis, Tenn.
Mortland, Ernest Albert. ....	.....	Hardin, Ill.
Morris, Edward James .....	.....	Rolla, Mo.
Norton, Benjamin Newton...	.....	Sedalia, Mo.
Pickles, John Lewis .....	.....	Desoto, Mo.
Rex, Harry Noel	A. B. (Knox College).	Creston, Iowa.
Walsh, Francis Henry .....	.....	Gilbertsville, Mass.
Wilson, Albert Dyke. ....	.....	Kansas City, Mo.
<i>Juniors.</i>		
Alexander, Raphael Currier..	.....	Maryville, Mo.
Bell, Frank Rolla .....	.....	Rich Hill, Mo.
Conrads, Ralph Augustus....	.....	Trenton, Mo.
D'Arcy, Arthur Ignatius....	.....	Denver, Colo.
Ellis, Charles Wesley ....	.....	Denver, Colo.
Estes, Walter Dalton.....	A. B. (Colgate University.)	Hamilton, N. Y.
Gill, William Harris .....	.....	Rolla, Mo.
Hauenstein, Frederick	A. B. (Westminster).	Tusculumbia, Mo.
Hoyle, Charles .....	.....	St. Louis, Mo.
Logan, Louis Sublette.....	.....	St. Joseph, Mo.
Minor, Cyrus Edward.....	.....	Springfield, Mo.
Moore, Stanley Ralston.....	Cherryvale, Kan.
Perrier, Alphonse Sylvan....	Gillett, Colo.
Roesler, Herbert Arno.....	Dallas, Tex.

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Name.	Course.	Postoffice.
Schulze, Eugene Vincent.....	Vetschau, <i>Germany</i> .
Southgate, John McKnight.....	Rolla, Mo.
Taussig, Amadee Jolivet.....	St. Louis, Mo.
Trask, Samuel Mathes.....	Memphis, <i>Tenn.</i>
Webster, Royal Sylvester.....	Kansas City, Mo.
Weidner, Frank.....	Dixon, Mo.
<i>Sophomores.</i>		
Allee, Orin Paul.....	Kirkwood, Mo.
Ambler, John Owen.....	St. Louis, Mo.
Bayha, William Lobenstine.....	Kansas City, Mo.
Black, James Kennedy.....	Clayton, Mo.
Bland, George Vest.....	Lebanon, Mo.
Brown, Albert Gourley.....	St. Joseph, Mo.
Carpenter, Robert William.....	St. James, Mo.
Caufman, Harry Effley.....	St. Louis, Mo.
Chase, Arthur Reynolds.....	A. B. (Iowa College).	Ocheydan, <i>Iowa</i> .
Clark, Joseph.....	Jennings, Mo.
Christopher, James Knight.....	Kansas City, Mo.
D'Arcy, Richard Lawlor.....	Denver, <i>Colo.</i>
Delano, Lewis Alfred.....	Ironton, Mo.
Dunkin, Damon Duffield.....	Kansas City, Mo.
Elliott, Germaine Maxon.....	Clay Center, <i>Kan.</i>
Fish, Frederick Thomas.....	Davenport, <i>Iowa</i> .
Fraizer, Beulah Margaret.....	Rolla, Mo.
German, Frank Arthur.....	Rolla, Mo.
Gregg, David McMurtrie.....	Joplin, Mo.
Gregory, James Albert.....	Joplin, Mo.
Harris, George Walter.....	Yankton, <i>S. D.</i>
Hazard, Fred Harrison.....	Hull, <i>Iowa</i> .
Heck, Elmer Cooper.....	Lathrop, Mo.
Hoevel, William Alexander.....	St. Louis, Mo.
Johnson, Herbert Fletcher.....	Kansas City, Mo.
Keenan, John Thomas.....	Lonsdale, <i>R. I.</i>
King, Charles LeClair.....	Reynoldsville, <i>Pa.</i>
Leavitt, James Clifford.....	Kansas City, Mo.
McTighe, William Arthur.....	Memphis, <i>Tenn.</i>
Moll, Kurd Victor.....	St. Louis, Mo.
Morgan, Glen Beckley.....	Indianapolis, <i>Ind.</i>
Peatross, James Linwood.....	Washington, <i>D. C.</i>
Pinto, Luman Randolph.....	St. James, Mo.
Pomeroy, Charles Hart.....	Kansas City, Mo.
Poole, Frank Bishop.....	Rolla, Mo.
Prugh, Julian Insko.....	Sioux City, <i>Iowa</i> .
Quinn, Michael Vincent.....	Penn Yam, <i>N. Y.</i>
Randall, Clark Christopher.....	Kansas City, Mo.
Richards, Oren.....	Kansas City, Mo.
Sample, Charles William.....	Pocahontas, Mo.
Schaberg, Benjamin Franklin.....	Clayton, Mo.
Schroeder, John Severin, Jr.....	Peabody, <i>Kan.</i>
Sheldon, Wilbur Elihu.....	Schenectady, <i>N. Y.</i>
Schnitzer, John Liborius.....	Hannibal, Mo.
Schockley, Percy Chalmette.....	Nat. Military Home, <i>Kan.</i>
Simon, Edward Montifore.....	Kansas City, Mo.
Thomas, Marion Lee.....	Columbiana, <i>Ohio</i> .
Tweed, Walter James.....	Houston, Mo.
Wilder, Michael Alonzo.....	Trinidad, <i>Colo.</i>
Willey, Clifford Redman.....	Maryville, Mo.
Williams, Bruce.....	Chanute, <i>Kan.</i>
Woods, Clarence.....	Silver City, <i>Idaho</i> .
Wright, Ira Lee.....	Dresden, Mo.
Wrisberg, Charles George.....	Webster Groves, Mo.

Name.	Course.	Postoffice.
<i>Freshman.</i>		
Armstrong, Ralph Augustus..		Denver, <i>Colo.</i>
Baker, George Craft....		Paris, <i>Texas.</i>
Bates, Worth.....		Odessa, <i>Mo.</i>
Boles, Thomas, Jr.....		Ft. Smith, <i>Ark.</i>
Bone, Albert Jack.....		Kansas City, <i>Mo.</i>
Brown, James Alonzo.....		Noblesville, <i>Ind.</i>
Brown, James Kerr.....		Ft. Smith, <i>Ark.</i>
Burgher, Mark Bernie..		Light, <i>Mo.</i>
Carter, Edward Ernest..		Lowell, <i>Mass.</i>
Cary, Carl Frederick. . .		Bolivar, <i>Mo.</i>
Chamberlain, Harry Carleton		St. Louis, <i>Mo.</i>
Coffman, James Albert..		Rolla, <i>Mo.</i>
Connelly, William Arthur...		Jerome, <i>Arizona.</i>
Couch, Meredith Coleman...		Fredonia, <i>N. Y.</i>
Cowperthwaite, Thomas..		Coal Creek, <i>Colo.</i>
Draper, Joseph Washington..		Lebanon, <i>Mo.</i>
Followell, Dexter Benjamin..		Rolla, <i>Mo.</i>
Ford, Vivia.....		Golightly, <i>S. C.</i>
Gardiner, William Alexander		Fullerton, <i>Cal.</i>
Grantham, Orion Asburv..		Pattonsburg, <i>Mo.</i>
Gratiot, Leon Pedreauxville..		Shullsburg, <i>Wis.</i>
Gray, Henry Lilburn.....		Bowling Green, <i>Mo.</i>
Guntley, Edward Anthony...		St. Louis, <i>Mo.</i>
Hand, Horace Alonzo.....		Stuttgart, <i>Ark.</i>
Hamman, John Stewart.....		Denver, <i>Colo.</i>
Harrison, Georgia.....		Rolla, <i>Mo.</i>
Herndon, Robert Carn.....		Lebanon, <i>Mo.</i>
Hughes, Richard Kingston...		Neosho, <i>Mo.</i>
Hurtgen, John.....		Hillsboro, <i>Mo.</i>
Joyce, Alfred Joseph.....		Leadville, <i>Colo.</i>
Kepler, Henry Clay.....		Alexandria Bay, <i>Mo.</i>
Kindricks, Alpha Harney...		Seymour, <i>Mo.</i>
Klaus, Frank.....		East St. Louis, <i>Ill.</i>
Kline, Olive.....		Rolla, <i>Mo.</i>
Kunz, David.....		Mountain View, <i>Nev.</i>
Lehman, John Ludwig Gustav		Rolla, <i>Mo.</i>
Leizure, Clyde McKeever...		Fargo, <i>N. D.</i>
Lancaster, Charles.....		Leadville, <i>Colo.</i>
McCaw, Frederick John..		Rolla, <i>Mo.</i>
Mapes, Harold Thomas.....		Philadelphia, <i>Pa.</i>
Mitchell, Robert Colfax...		Duluth, <i>Minn.</i>
Morgan, John Henry.....		Rolla, <i>Mo.</i>
Myers, Claude.....		St. Louis, <i>Mo.</i>
Nesbitt, William.....		Rolla, <i>Mo.</i>
Neidringhaus, Irving Charles.		St. Louis, <i>Mo.</i>
Palmer, Leffler.....		Saratoga, <i>Wyo.</i>
Peters, William John.....		St. Louis, <i>Mo.</i>
Poole, Ralph Edward.....		Rolla, <i>Mo.</i>
Powell, Frank Bowman.....		Rolla, <i>Mo.</i>
Price, Evan Edmund.....		Canon City, <i>Colo.</i>
Ray, George David.....		Rolla, <i>Mo.</i>
Reid, James Logan.....		Carthage, <i>Mo.</i>
Reid, Adam.....		Mineral, <i>Kan.</i>
Rice, Anna Louise.....		Wadena, <i>Minn.</i>
Richards, Charles Hamilton..		Prescott, <i>Ariz.</i>
Rubey, Harry Kelly.....		St. Louis, <i>Mo.</i>
Rucker, Ray Fleming.....		Rolla, <i>Mo.</i>
Shaw, Oliver Clark.....		Rolla, <i>Mo.</i>
Shields, Daniel Francis.....		Carrollton, <i>Mo.</i>
Simpson, Maurice Edwards..		Kansas City, <i>Mo.</i>
Smith, Charles Dash.....		Kirkwood, <i>Mo.</i>
Squier, Robert Harold.....		St. Louis, <i>Mo.</i>
Stewart, David Elliot Kinnear		Madoc, <i>Ont.</i>
Talbert, Thomas Jesse.....		Cassville, <i>Mo.</i>

Name.	Course.	Postoffice.
Taylor, Willard Parkhurst...	Cleveland, <i>Ohio</i> .
Thomas, Albert Augustus...	Marionville, Mo.
Via, Wilford Amos.....	Rolla, Mo.
Villareal, Felizardo.....	C. R. Rubio, <i>Mex.</i>
Wells, Frank Oliver.....	Prescott, <i>Ariz.</i>
White, George Curnoe.....	Neosho, Mo.
Whitehead, Arthur Stanley...	St. Joseph, Mo.
Wyman, William Charles, Jr.	Ottumwa, <i>Iowa</i> .
<i>Specials.</i>		-72
Arthur, Cornie Lenox.....	Lake Springs, Mo.
Beall, Sarah.....	Kansas City, Mo.
Blanchard, Alice Cary.....	Rolla, Mo.
Buehler, Henry Andrew.....	A. B. (University of Wis.)	Monroe, Wis.
Clark, Oliver Hunter.....	Cleveland, <i>Ohio</i> .
Finn, Albert Nathan.....	Sedgewick, <i>Kan.</i>
Gage, Frank William.....	Superior, <i>Wis.</i>
Heller, Robert.....	Rolla, Mo.
Jones, Birdie.....	Rolla, Mo.
Kinney, Joseph B.....	Sullivan, Mo.
Orchard, Craig Edward.....	Salem, Mo.
Pyles, Nathaniel.....	El Dorado Springs, Mo.
Prout, John.....	Golden, <i>Cal.</i>
Reid, John Weir.....	Memphis, <i>Tenn.</i>
Scott, John Walter.....	Rolla, Mo.
Scott, Lewis Lawrence.....	Rolla, Mo.
Seele, Robt. Henry H.....	Rolla, Mo.
Squier, Edward Eugene.....	St. Louis, Mo.
Wade, Jennie.....	Rolla, Mo.
Weddell, Francis Maurice.....	Rolla, Mo.
Wood, George Rufus.....	Bradford, <i>Mass.</i>
Zertuche, Francisco.....	C. R. Rubio, <i>Mex.</i>

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SUMMARY.

UNITED STATES.

Arizona.....	4
Arkansas.....	3
California.....	2
Colorado.....	11
Idaho.....	1
Illinois.....	3
Iowa.....	6
Indiana.....	3
Kansas.....	8
Massachusetts.....	3
Minnesota.....	2
Missouri.....	113
New York.....	4
Nevada.....	1
North Dakota.....	1
Ohio.....	3
Pennsylvania.....	3
Rhode Island.....	1
South Carolina.....	1
South Dakota.....	1
Tennessee.....	4
Texas.....	2
Washington, D. C.....	1
Wisconsin.....	3
Wyoming.....	1

FOREIGN.

Canada.....	1
Germany.....	1
Mexico.....	4
West Indies.....	1
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	7
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Total.....	192

SUMMER SCHOOLS.

A. AT COLUMBIA.

L.=Latin; Gr.=Greek; G.=German; Fr.=French; M.=Mathematics; E.=English;
 B.=Biology; P.=Physics; S.=Sloyd; Hort.=Horticulture; Ag.=Agriculture;
 Geol.=Geology; Com.=Commercial; Sp.=Spanish; H.=History; C.=
 Chemistry; Histol.=Histology; T.=Technique; D.=Drawing;
 Em.=Embryology; C. A.=Comp. Anatomy; Z.=Zool-
 ogy; P. M.=Pattern Making; Anat.=Anatomy.

Name.	Studies.	Postoffice.	County.
Adams, Mary Elizabeth.....	E., H.	Appleton City....	St. Clair.
Adams, William Thomas.....	Gr., Fr., M.	Rusk, <i>Texas</i> .	
Adkisson, Jean.....	Fr., G.	Kansas City....	Jackson.
Adkisson, Lydia.....	E., G.	Houston, <i>Texas</i> .	
Ahrens, Anna Helen.....	D.	Ft. Smith, <i>Ark</i> .	
Alexander, Carter.....	E., Gr.	Paris.....	Monroe.
Allen, Frances E.....	H.	Columbia.....	Boone.
Allen, Archibald Murray.....	Fr., H.	Columbia.....	Bcone.
Allison, Claude Wallace.....	H., G.	Loneoak.....	Bates.
Alsop, Birch Hunt.....	L.	New Franklin....	Howard.
Alvey, Mrs. Tirza.....	H., P.	Seneca.....	Newton.
Ambrose, George Lewis.....	L., P., M.	Missoula, <i>Mont</i> .	
Anthony, Hettie Marguerite...	D.	Maryville.....	Nodaway.
Arnold, Sam Watt.....	M., G.	Energy.....	Schuyler.
Arthur, Sylvester Irvin.....	Em., Histol.	Union City, <i>Ind</i> .	
Ayres, Evelyn.....	L., M.	Kirkwood.....	St. Louis.
Bailey, Ralph Emerson.....	L.	Pigeon, <i>Ill</i> .	
Baker, Samuel Aaron.....	H., E.	Jefferson City....	Cole.
Baker, Alice Helen.....	E., L.	Shelbina.....	Shelby.
Baker, Lillian.....	M.	Carthage.....	Jasper.
Baldwin, Pearl.....	L.	Sedalia.....	Pettis.
Barbee, Frederick Hardman..	E., C.	Webb City.....	Jasper.
Barlow, Bessie.....	M.	Kansas City.....	Jackson.
Barnes, William Chauncey...	C.	Monrovia, <i>Cal</i> .	
Barnhardt, Wilford Caldwell..	Com.	Columbia.....	Poone.
Bates, Mabel.....	Hort., S.	Shelbina.....	Shelby.
Beaman, Robert Luther.....	E., Hist.	Butler.....	Bates.
Beery, Roy.....	H., M.	Holt.....	Clay.
Beinke, Arthur Fred.....	H., P.	Washington.....	Franklin.
Belk, William Godfrey.....	H., Gr.	Hermann.....	Gasconade.
Belisle, Matthew Robertson...	P.	Appleton City....	St. Clair.
Benedict, Mrs. Carrie.....	D.	Chanute, <i>Kan</i> .	
Bennett, John Edward.....	G., L.	Sullivan.....	Franklin.
Biggs, Helen Elise.....	E., H.	California.....	Moniteau.
Birdwell, Alton William.....	M., P.	Lindale, <i>Tex</i> .	
Bistline, Mayme.....	E., S.	Carthage.....	Jasper.
Blakey, Roy Gillispie.....	E., M.	Maud.....	Shelby.
Blodgett, Franc M.....	G., L.	Shelbina.....	Shelby.

Name.	Studies.	Postoffice.	County.
Blodgett, Gertrude.....	M., E.	Shelbina.....	Shelby.
Blythe, John Rothwell.....	Fr., G.	Ashland.....	Boone.
Boardman, Emma.....	Fr., G.	Harrisonville.....	Cass.
Boman, John Sidney.....	Fr., M., E.	Roads.....	Carroll.
Bone, Mary McCoy.....	S.	Kansas City.....	Jackson.
Bones, Nellie Edith.....	E.	Nome City, <i>Alaska</i>	
Boone, Delia.....	E., M., Ag.	Holden.....	Johnson.
Booth, Fannie Willis.....	L., H.	Fulton.....	Callaway.
Borcherding, Chris. F.....	H., P., G., E.	New Haven.....	Franklin.
Bradsher, Earl.....	H.	Clifton Hill.....	Randolph.
Bramlett, Carrie Etta.....	M., H., E.	O'Fallon.....	St. Charles.
Bright, James Fitzgerald.....	E., L.	Polk, <i>Tenn.</i>	
Brightman, Sam C.....	L., H.	Lancaster.....	Schuyler.
Briscoe, Edward Andrew.....	D.	Tipton.....	Moniteau.
Brown, Calvin R.....	L.	Appleton City.....	St. Clair.
Browning, James J.....	Gr., L.	Molino.....	Audrain.
Brunjes, Ernest August.....	L.	Warsaw.....	Benton.
Burford, Charles E.....	M., P.	Warrensburg.....	Johnson.
Burgher, Sylvia.....	C., P., B.	Light.....	Maries.
Burress, Lyda M.....	M., H.	Sedalia.....	Pettis.
Busch, Ella Adeline.....	Fr., H.	Washington.....	Franklin.
Bush, Ernest Forrest.....	B., G.	Fulton.....	Callaway.
Button, Clifford H.....	E., L., Ag., P.	Appleton City.....	St. Clair.
Caldwell, Lou Belle.....	Gr.	Slater.....	Saline.
Caldwell, Mattie Amelia.....	M., E.	Pineville.....	McDonald.
Campbell, Laura Belle.....	H.	Columbia.....	Boone.
Campbell, J. Claud.....	H., L., M.	Montrose.....	Henry.
Campbelle, Alonzo Ferris.....	Ag.	Willow Springs.....	Howell.
Carpenter, Albert Cotting.....	S., E.	Kansas City.....	Jackson.
Carpenter, George William.....	Em.	Miami.....	Saline.
Carroll, Stephen Samuel.....	D., M., P.	Perry.....	Ralls.
Carroll, Orra Ella.....	H.	Louisiana.....	Pike.
Carter, Dorothy.....	L.	Fulton.....	Callaway.
Carter, Ewell Martin.....	Hort., M.	Hallsville.....	Boone.
Cauthorn, Louise Leah.....	D.	Columbia.....	Boone.
Cauthorn, Bessie.....	Fr.	Columbia.....	Boone.
Christian, Mayme.....	E., H.	Tarkio.....	Atchison.
Clifton, Sophronia Lorena.....	H., E.	Curryville.....	Pike.
Cloak, Guy.....	P., Com., M.	Allenton.....	St. Louis.
Cobb, Samuel Franklin.....	Fr., G.	Columbia.....	Boone.
Cochel, Mary Alice.....	M., H., Ag., E.	Columbia.....	Boone.
Cockefair, Edgar Augustus.....	B., H., M.	Unionville.....	Putnam.
Cofer, James Lewis.....	P., H.	Monarch.....	St. Louis.
Cole, Granville Malcolm.....	Geol.	Kansas City.....	Jackson.
Cole, William Leslie.....	E., H.	Walbert.....	Franklin.
Cole, Norman John.....	H.	Quaker.....	Washington.
Coleman, William Tyler.....	P.	Monarch.....	St. Louis.
Collins, Charles.....	L., Gr.	St. Louis City.....	
Colvin, George Henry.....	L., P.	Newcomer.....	Chariton.
*Connally, William Arthur.....	.....	Beaufort.....	Franklin.
Connelly, Mary Gertrude.....	L.	Kansas City.....	Jackson.
Conner, C. M.....	Ag.	Clemson College.....	S. C.
Conway, Mary Ellen.....	Fr., G.	Vandalia.....	Audrain.
Cosby, Byron.....	M., F.	Spruce.....	Bates.
Cottrill, Bernit Clyde.....	H., P., Ag.	Savannah.....	Andrew.
Cowherd, Clyde Estis.....	B., C.	Columbia.....	Boone.
Cox, Leona Corena.....	M., H.	Richland.....	Pulaski.
Craig, Hattie.....	H., P., Ag.	Seneca.....	Newton.
Craig, James Herman.....	E., H., L.	Cyrene.....	Pike.
Crawford, James Elmer.....	G.	Wetmore, <i>Kan.</i>	
Creason, Josiah Gant.....	Fr., Gr.	Columbia.....	Boone.
Cross, Viola Edith.....	M., H., E., C.	Montrose.....	Henry.
Crumbaugh, Lucy Cornelia.....	S., D.	Columbia.....	Boone.
Crump, Rosa.....	E., Gr.	Lancaster.....	Schuyler.
Cunningham, Bertha D.....	M.	Columbia.....	Boone.
Cunningham, Risdon Jay.....	E., P.	LaPlata.....	Macon.

*Did not matriculate.

Name.	Studies.	Postoffice.	County.
Cuolahan, Agnes Omega.	M., H., E.	Victoria	Jefferson.
Dallmeyer, Pauline Anne R.	E., H.	Jefferson City	Cole.
Darrow, Lemuel DeWitt.	M., Fr., E.	Macon	Macon.
Davis, Mrs. Clara Leet.	E., M.	Kirkwood	St. Louis.
Dearing, Milton Matthews	H.	Columbia	Boone.
Decker, Edgar Clay.	E., B.	Kearney	Clay
Deppe, Charles Alexander.	Em., H.	Columbia	Boone.
Detienne, John Antoyne.	Fr., L.	Elsberry	Lincoln.
Dickson, Ernest E.	M., H., E.	Longtown	Perry.
Dimmitt, Roy Lester.	P., S.	Shelbyville	Shelby.
DuBois, Charles Clifford	Geol., Ag.	Kansas City	Jackson.
Duffy, Bessie.	G., H., Fr.	Clinton	Henry.
Dyer, Virginia.	Fr.	Lawrence, <i>Kan.</i>	
Edelen, Lena L.	E., C.	Wyaconda	Clark.
Edmiston, Henry Hileman.	E., L.	Wallace, <i>Idaho.</i>	
Edmonds, Ora E.	H., P.	Tina	Carroll.
Edmonds, Nora A.	E., H.	Tina	Carroll.
Eitzen, Hertha A.	L., H., M.	Boonville	Cooper.
Eitzen, Arthur Robert.	D.	Boonville	Cooper.
Ely, Maye.	E., M.	Monroe City	Monroe.
Ely, Pearl.	E.	Monroe City	Monroe.
Ensign, Bertha Leona.	Gr., P.	Cameron	Clinton.
Erwin, Alice.	E., C.	Houston	Texas.
Evans, Lenna Ruth.	E.	Monroe City	Monroe.
Evans, John Roswell	E., H.	Maryville	Nodaway.
Ewington, Alfred	Fr., S.	White Heath, <i>Ill.</i>	
Fair, Fred.	B., H., Ag.	Trenton	Grundy.
Fair, Samuel Calvin.	M., E., Ag.	Trenton	Grundy.
Falconer, George Percy.	E., G.	Jefferson City	Cole.
Faller, Alice Blanc.	G.	Indian Grove.	Chariton.
Faller, Jessie.	E.	Indian Grove.	Chariton.
Farnham, Emma Leita.	H., E.	Rich Hill.	Bates.
Farren, Emma C.	E., P., H.	Kansas City	Jackson.
Ferguson, James Taylor, Jr.	L.	Mokane.	Callaway.
Fewsmith, Joy.	D.	Columbia	Boone.
Finley, Georgiana.	E.	Excelsior Springs.	Clay.
Fisher, Mary McFarlane.	Fr., G.	Columbia	Boone.
Flood, Sallie R.	D.	Columbia	Boone.
Flynt, William Richard.	E.	Hallsville.	Boone.
Foard, Edward Thomson.	H., P.	Flatwood.	Ripley.
Fogle, Claude Chester.	Fr., H., L.	Lancaster.	Schuyler.
Foglesong, Lenna M.	M., E.	Lamar.	Barton.
Ford, Thomas Benjamin.	Gr., L.	Vandalia	Audrain.
Foster, Guy Kenneth.	Em., G., Histol.	Columbia	Boone.
Foster, Asa Dillard	G., Em.	Springdale.	Pike.
Foster, William Yancy.	H., P.	Harwood	Vernon.
Fountain, James Richie.	Geol.	Centralia	Boone.
Fry, Myra.	E., D.	Rich Hill.	Bates.
Fugitt, Katherine Olive.	E., S.	Carthage	Jasper.
Fulks, Elma.	L., H.	California	Moniteau.
Gaines, Lou.	Com.	Deepwater	Henry.
Gans, Nora Johnston.	H.	Columbia	Boone.
Gentry, Benajah Pitts.	L.	Kirksville	Adair.
Gentry, Ella Lee.	E., M.	Monroe City.	Monroe.
Gerber, Rosa Mae.	H., E.	Hematite	Jefferson.
Gerould, Harriet D.	B.	Hollis, <i>N. H.</i>	
Gex, Rena.	E., M.	Paris	Monroe.
Gilliam, Lelia	E., H., M.	Brunswick.	Chariton.
Goodin, John How	H., E.	Sikeston	Scott.
Gordon, Hattie Harris.	Hort., S.	Jefferson City.	Cole.
Gordon, Fleetwood.	G.	Columbia	Boone.
Gordon, Mary Josephine.	E., H.	Callao	Macon.
Grant, Agnes.	M., S.	Shelbina	Shelby.
Grant, Willis Martin.	M., B.	Ridgeway	Harrison.
Graves, Lydia C.	D.	Woodlandville.	Boone.
Gray, Luella.	E., M.	Avalon	Livingston.

Name.	Studies.	Postoffice.	County.
Gray, George Leslie.....	L., B.	Stanberry.....	Gentry.
Green, Talitha Jennie.	Gr., E.	Lathrop.....	Clinton.
Greer, Bertha Alice.....	P., C.	Joplin.....	Jasper.
Griffith, Mary Ellen.....	L.	Kirkwood.....	St. Louis.
Grove, William Douglas....	E., Ag.	Ferguson.....	St. Louis.
Groves, Andrew Washington..	L., G.	Allenville.....	Cape Girardeau.
Guthrie, Lulu.....	D., Fr.	Columbia.....	Boone.
Gwinn, Joseph Marr.....	G., H.	Joplin.....	Jasper.
Hagan, Lizzie.....	E., D.	Rich Hill.....	Bates.
Hageman, George W.....	E., H.	Fitzgerald, <i>Ga.</i>	
Hammack, James Albert.	P.	Pocahontas, <i>Miss.</i>	
Hamilton, Matilda Magee....	M., H., E.	Joplin.....	Jasper.
Hamilton, Robert Emmet....	Gr., Fr.	Kirksville.....	Adair.
Hammond, Lizzie.....	E., Fr.	Holden.....	Johnson.
Hancock, Archie Rex.....	M., L.	Laddonia.....	Audrain.
Hardy, Carolyn.....	M., E.	Hillside.....	St. Louis.
Harvey, Lida E.....	E., M.	Kansas City.....	Jackson.
Hathaway, Bishop.....	Gr.	Stanberry.....	Gentry.
Hauhart, William Frederic....	E., Fr.	Ballwin.....	St. Louis.
Hawkins, George Lorimer....	M., Gr.	Hematite.....	Jefferson.
Haynes, Fred Elmore.....	E., B.	Nevada.....	Vernon.
Head, Iva Emma.....	S.	Jefferson, <i>Iowa.</i>	
*Henderson, Mary Evelyn.....		Columbia.....	Boone.
Henderson, Ethel.....	Com.	Columbia.....	Boone.
Hendrix, Frank Conn.....	E., L.	Jessamine.....	Ralls.
Hengy, Eva.....	M., E.	Holden.....	Johnson.
Henley, Margaret.....	Hort., E.	Carthage.....	Jasper.
Herndon, Georgie Hazel.....	E., L.	Lamar.....	Barton.
Hess, George Lee.....	H., P.	Ottawa, <i>Kan.</i>	
Hice, Annette.....	H., S.	Kansas City.....	Jackson.
Hicklin, Fannie C.....	L., H.	New London.....	Ralls.
Hickman, Clara Buckner.....	Hort., S.	New Franklin.....	Howard.
Higgins, Madison F.....	Hort., S.	Jamesport.....	Daviess.
Hill, Pearl V.....	E., H.	Rockville.....	Bates.
Hill, Mary E.....	Com., Hort.	Carrollton.....	Carroll.
Hodge, Ed Monroe.....	C., L., M.	Vichy.....	Maries.
Hoecker, Charles Henry.....	M., G.	St. Louis City.	
Hoge, William McGuffey.....	P.	Boonville.....	Cooper.
Holloway, Russell Edward....	Gr., L.	Rowena.....	Audrain.
Homberger, Edward Henry....	B., L.	Maysville.....	DeKalb.
Hook, James Arthur.....	D.	Columbia.....	Boone.
Horton, Donia Mae.....	H., L.	Columbia.....	Boone.
Hout, Gus J.....	M.	Carthage.....	Jasper.
Howe, Jennie C.....	E., M.	Kansas City.....	Jackson.
Howell, Shrader P.....	Gr., H., E., Ag.	Appleton City.....	St. Clair.
Huddle, David Franklin, Jr..	P.	Homer, <i>La.</i>	
Hudson, James Franklin.....	S.	Columbia.....	Boone.
Huggins, Augusta.....	Com.	Shawnee, <i>Okla.</i>	
Hughes, Uriel Wright.....	E., G.	Miami.....	Saline.
Hughes, Isaac Henry.....	P., H.	Bloomfield.....	Stoddard.
Hugley, Charles B.....	G., C.	Paris.....	Monroe.
Humphrey, George Lee.....	E., L., M.	Breckenridge, <i>Ky.</i>	
Hupe, William F.....	B., C.	Montgomery City.....	Montgomery.
Hutcheson, Grace.....	E., Hort.	Carthage.....	Jasper.
Imbler, Thomas Warren.....	H., P.	Kirksville.....	Adair.
Ingram, Betta.....	H. E.	Rich Hill.....	Bates.
Jackson, Eliza Lucile.....	L.	Martinstown.....	Putnam.
Jackson, Callie.....	H., E.	Centralia.....	Boone.
Jackson, Willa B.....	H., E.	Lamar.....	Barton.
Jacobs, David.....	D.	Columbia.....	Boone.
Jeffries, Alonzo.....	L.	Columbia.....	Boone.
Jesse, Richard Henry, Jr.....	Geol.	Columbia.....	Boone.
Jesse, Caroline Elizabeth.....	H., M.	Columbia.....	Boone.
Jesse, Mary Polk.....	H.	Columbia.....	Boone.

*Did not matriculate.

Name.	Studies	Postoffice.	County.
Jewett, Ida.....	E., S.	Shelbina.....	Shelby.
Johnson, Maud A.....	E., M.	Carthage.....	Jasper.
Jolly, Ethel.....	M., G.	Trenton.....	Grundy.
Jolly, Veta.....	M., G.	Trenton.....	Grundy.
Kahn, Theckla.....	Gr., Fr.	Columbia.....	Boone.
Keeler, Ella.....	E., H.	Appleton City..	St. Clair.
Keith, Rena Belle.....	H.	Joplin.....	Jasper.
Kelley, Archibald James.....	H., B., E.	Mayview.....	Lafayette.
Kelley, Mary Elizabeth.....	M., D.	Springfield.....	Greene.
Kellum, Ida C.....	M., S.	Joplin.....	Jasper.
Kelsey, Fred.....	L.	Garden City.....	Cass.
Kenyon, Mrs. Mary.....	E.	Poplar Bluff.....	Butler.
Kieffer, Victor Bancroft.....	Gr., G.	St. Louis City.	
Kilburn, Henry Clay.....	Hort., P.	Carthage.....	Jasper.
Killam, Susan Elizabeth.....	E.	Winfield.....	Lincoln.
Killion, Charles Henry.....	M.	Sedalia.....	Pettis.
Kingsbaker, Rae.....	E., H.	Sedalia.....	Pettis.
Kizer, Raymond.....	B., P., M.	Stanberry.....	Gentry.
Kneisley, Sallie Rollins.....	D.	Columbia.....	Boone.
Knight, Frank Robert.....	P.	Griesel.....	St. Clair.
Koch, Clara May Barbara.....	G., L., E.	LaGrange.....	Lewis.
Koken, Walter Frank.....	D.	St. Louis City.....	
Kurtz, Dan'l Webster Boone Jr	E., P.	Columbia.....	Boone.
Ladman, Charles Joseph.....	B., P.	Portland.....	Callaway.
Lamkin, Uel Walker.....	H.	Clinton.....	Henry.
Lankaster, Mrs. Herschel W...	L.	Rich Hill.....	Bates.
Lapp, Lizzie.....	G., H.	Selina, <i>Kan.</i>	
Larkam, Charles Newton.....	L.	Maitland.....	Holt.
Leavenworth, George.....	Geol.	Ste. Genevieve..	Ste. Genevieve.
Lee, Arthur E.....	L., Gr.	Ft. Smith, <i>Ark.</i>	
Leib, C. M.....	M., S.	Columbia.....	Boone.
Leib, Mrs. C. M.....	Fr., G.	Columbia.....	Boone.
Liepold, Henrietta.....	P.	Columbia.....	Boone.
Linaham, Mary.....	M., E.	Troy.....	Lincoln.
Lingle, Mary Lee.....	Hort., Ag.	Warsaw.....	Benton.
Loeb, Virgil.....	Geol.	Columbia.....	Boone.
Long, Mary Frances.....	Fr.	Centralia.....	Boone.
Long, C. M.....	E., Fr.	Hallsville.....	Boone.
Long, Ona.....	G.	Kansas City.....	Jackson.
Lotspeich, Luolla.....	B., L.	Passaic.....	Bates.
Lovelace, Robert Nelson.....	E., Gr.	LaGrange.....	Lewis.
Lushbaugh, Erith Evert.....	D.	Columbia.....	Boone.
Magenheimer, Anna L.....	Ag., E.	St. Charles.....	St. Charles.
Major, Davis Willis.....	E., P.	Clinton.....	Henry.
Malott, James Isaac.....	G., E.	Wanamaker.....	Saline.
Maltby, Gertrude.....	B., C.	Sedalia.....	Pettis.
Manser, Virginia Lee.....	B., P.	Burden, <i>Kan.</i>	
Manuel, Lulu.....	E., S., H.	Clarence.....	Shelby.
Mapes, Seth Leslie.....	M., E., H., Ag.	Laddonia.....	Audrain.
March, Allen Wright.....	M., H.	Hallsville.....	Boone.
Marx, Ellen Katherine.....	G.	Columbia.....	Boone.
Mattingly, Emma Florence.....	M., L.	Rich Hill.....	Bates.
Mattox, Harry Lee.....	Gr., L.	Sullivan.....	Franklin.
Mayberry, Amadore Jordan.....	H., M.	Mountain Grove..	Wright.
Meister, James Franklin.....	M., C.	Kansas City.....	Jackson.
Melton, Emma.....	L.	Clinton.....	Henry.
Miller, Helen Chenault.....	H.	Ft. Scott, <i>Kan.</i>	
Millner, Francis Edward.....	E., S., M.	Crestline, <i>Kan.</i>	
Milroy, Mollie S.....	H., S.	Louisiana.....	Pike.
Mirrielees, Ida Jean.....	H.	Macon.....	Macon.
Montgomery, Helen Bell.....	E., H.	Columbia.....	Boone.
Montgomery, Maud Ellis.....	Fr., H.	Columbia.....	Boone.
Montgomery, Eva May.....	E., H., Ag., M.	Omaha, <i>Neb.</i>	
Moody, Mark.....	B., C.	Webster Groves..	St. Louis.
Moore, William Dunn.....	Gr., H.	St. Louis City.	
Moore, Olin Harris.....	Gr., Fr.	Columbia.....	Boone.

Name.	Studies.	Postoffice.	County.
Moore, Henry Thomas.....	Gr., Fr.	Columbia	Boone.
Moore, Mrs. Eugenia Thomas.	Fr.	Columbia	Boone.
Moore, Joseph Rokefeller.....	H.	Pacific	Franklin.
Morehead, French Hugh	D.	Columbia	Boone.
Morehead, Lucy Olive.....	M., Fr.	Columbia	Boone.
Morlan, Ernest Earl.....	Geol.	Garden City.....	Cass.
Morrin, Mrs. Mark J.	Fr., G.	Kansas City.....	Jackson.
Moul, John Frederick.....	B., H., E., M.	Freeman	Cass.
Mumm, Emma O	H., E.	Mound City.	Holt.
Murch, Harvey G.....	M., P., Ag.	Lamar	Barton.
Murry, Nettie Lee.....	D.	Murry	Boone.
McAfee, Annie	Hort., H.	Auxvasse	Callaway.
McAlester, James.....	L.	Columbia	Boone.
McBaine, Richard Hiram.....	Gr. Fr.	Columbia	Boone.
McCaleb, Rebecca Isabel	Fr., G.	Tarkio	Atchison.
McCallon, Emma.....	L., E., M.	Rankin	Andrew.
McCanne, Mrs. Alice.....	E., H.	Montgomery City.	Montgomery.
McCartey, Nellie Blossom.....	Hort., G.	Carthage	Jasper.
McChesney, James Roger	P., G.	Hamburg, Ark.	
McChesney, Mrs. Minnie G....	E., B.	Hamburg, Ark.	
McClement, Kate.....	H., M., E.	Bethany	Harrison.
McCluney, Mrs. Mary Lura....	E., H.	Sedalia	Pettis.
McClure, Lucy.....	E., H., M.	Marshall	Saline.
McClure, Anna	E., M.	DeSoto	Jefferson.
McDermott, Joseph Lewis.....	E., L., H., M.	Buckner	Jackson.
McGhee, Lillian.	D.	Columbia	Boone.
McGill, Caroline.	Fr., Em., Histol.	Lebanon	Laclede.
McGowan, Laura Taylor	M., Fr.	Sedalia	Pettis.
McNutt, Frances.....	S.	Bowling Green...	Pike.
Nance, John William.....	M., E.	Russellville	Cole.
Naxera, Emma	E., S.	Louisiana	Pike.
Neale, Benjamin Mayberry	Com.	Ernest	Dade.
Newell, Anna Gray.....	Fr., G.	Carthage	Jasper.
Newlon, Nathan B	E., P., H.	Ewing	Lewis.
Northcutt, Mary Ina Klosking	E., Hort.	Thompson	Audrain.
O'Connor, Tom Edward.....	Fr., H., M.	Maryville.....	Nodaway.
Ogier, William C.	L., M., E.	Beaconsfield, Ia.	
Oliver, William Isaac.....	G.	Brown's Station..	Boone.
Onslow, Gertrude Elizabeth....	G., Gr.	Chillicothe.....	Livingston.
O'Rear, Miranda Allen.....	L., Gr.	Sweet Springs.....	Saline.
Osborn, Frank P.....	C., B.	Gomez.....	Shannon.
Otis, Merrill Edward	L., P.	Hopkins	Nodaway.
Overall, Jas. Sidney Rollins....	Gr., Fr.	St. Louis City.	
Owen, Laura Frances.....	E., M.	Paradise	Clay.
Owen, Bettie L.....	M., E.	Elk City, Kan.	
Owen, Fred Benjamin.....	G., H., L.	Clinton	Henry.
Owen, Maude.....	H., E.	Clinton	Henry.
Paine, Alice Milroy.....	M., H., E.	Louisiana	Pike.
Parker, Edith.....	D., S.	Columbia	Boone.
Perkins, Hila	H.	Rénick	Randolph.
Perry, Thomas Benton	D.	Carthage	Jasper.
Perry, Lyda Belle.....	S.	Carthage	Jasper.
Pew, Emmett.....	L., E.	Middletown	Montgomery.
Plunkett, Frank Willis.....	E., M.	Brunswick	Chariton.
Pomeroy, Mary.....	E., M.	Windsor	Henry.
Porter, Mary Estelle.....	S.	Columbia	Boone.
Potter, James Arthur.....	Geol.	Mt. Vernon	Lawrence.
Potter, Mary Bassett	Ag., E.	St. Joseph	Buchanan.
Prentis, Henning Webb, Jr....	Gr. Fr.	St. Louis City.	
Presson, James Allen.....	B., L.	Zach, Tenn.	
Price, Paul.....	M., L.	Greenville	Wayne.
Price, Emma Louise.....	H.	Joplin	Jasper.
Proctor, Julia C.....	E., D.	Palmyra	Marion.
Quirey, Rebecca H.....	E., M., Ag.	Lamar	Barton.
Rabourn, Sarah Brewer.....	Hort.	Columbia	Boone.
Rabourn, Susie McDowell.....	Gr.	Columbia	Boone.

Name.	Studies.	Postoffice.	County.
Ralston, Walter Henry.....	H., B., E.	Stanberry.....	Gentry.
Ramsey, Thomas Orrin....	H., Fr.	Revere	Clark.
Randall, Alice.....	M., H.	Bolckow.....	Andrew.
Reavis, Mrs. Mary D.....	E.	Breckenridge.....	Caldwell.
Reavis, George Washington...	E., L., M.	Taitsville.....	Ray.
Reed, Charles Wesley.....	M., S.	Cowgill.....	Caldwell.
Reid, Rosa Lurline.....	M., E.	Columbia.....	Boone.
Reid, Angie E.....	E., S.	Paris.....	Monroe.
Renfrow, Thomas O.....	H., E.	Cuba.....	Crawford.
Richards, Mabel May.....	M., H.	Bevier.....	Macon.
Richards, John Barrow.....	E., H.	Bevier.....	Macon.
Ridgeway, George Walter....	Fr.	Clark.....	Randolph.
Riley, William Ernest.....	C., P., E.	LaPlata.....	Macon.
Risch, Julia E.....	B., H., M., G.	Bobring.....	St. Louis.
Roberts, Laura Belle.....	Com.	Columbia.....	Boone.
Robison, Bessie.....	E.	Albany.....	Gentry.
Robinson, Thomas Wright...	Geol.	Macon.....	Macon.
Robinson, Lee.....	M., E.	Kansas City.....	Jackson.
Rochefford, Anna Belle.....	E.	Shaw.....	Boone.
Rochefford, Louise.....	H., G.	Shaw.....	Boone.
Rochefford, Rose Ella.....	G., S.	Shaw.....	Boone.
Rodes, Charles B, Jr.....	G., H.	Sedalia.....	Pettis.
Rodgers, Stella.....	H., E.	Montgomery City.	Montgomery.
Rodgers, Thomas G.....	G., Fr.	Houston, Minn.	
Rogers, James Burton.....	G., Ag.	Santa Fe.....	Monroe.
Rosenberger, Kath'r Albertine	G., Fr.	Central.....	St. Louis.
Rothfuchs, Emily.....	H., E.	Hermann.....	Gasconade.
Rowe, Harry C.....	E., P., Ag.	Appleton City...	St. Clair.
Rowly, Robert R.....	E., H.	Louisiana.....	Pike.
Rowly, William J.....	E., H.	Louisiana.....	Pike.
Rucker, Betty Shelby.....	E., H.	Marshall.....	Saline.
Rudolph, Don.....	G., E., H.	St. Louis City.	
Russell, Walter Clarence.....	L., H.	Columbia.....	Boone.
Sampson, Mary Watkins.....	M., E., Ag.	Rocheport.....	Boone.
Sanderson, Sadie.....	L., H.	Rich Hill.....	Bates.
Sanderson, Eva Florence.....	D., E.	Rich Hill.....	Bates.
Sayre, Herbert A.....	M., S.	Des Moines, Iowa.	
Schafer, Frederick Charles...	H., G.	Lancaster.....	Schuyler.
Scherer, Matthew J.....	S.	St. Louis City.	
Schmidt, Clara.....	L., Gr., H.	Lowry City.....	St. Clair.
Schooling, Lacy Parks.....	L.	Moberly.....	Randolph.
Sears, Nelson.....	L.	Deeridge.....	Lewis.
Seitz, Albert Voltine.....	E., Hort.	Jamestown.....	Moniteau.
Shank, Carrie Catherine.....	S., D.	Springfield.....	Greene.
Sharp, Lillian Mabel.....	E., D.	Sedalia.....	Pettis.
Sharp, Nathalie.....	Gr., L.	Kansas City.....	Jackson.
Shay, Edward Elmore.....	H., P.	Bachelor.....	Callaway.
Shepherd, Etta Lee.....	H., E.	Meadville.....	Linn.
Showalter, Mollie.....	E., H.	Appleton City...	St. Clair.
Shumard, Oliver Garfield....	G., Gr.	Ridgeway.....	Harrison.
Shumate, Ora B.....	H., M., Ag.	Jerico.....	Cedar.
Sievers, Augusta Louise.....	H., M.	Herculaneum.....	Jefferson.
Simmons, Emma Gertrude...	M., H.	Berryville, Ark.	
Simeral, Edwin Ernest.....	M., B.	Raymore.....	Cass.
Sinclair, Margaret.....	D.	Columbia.....	Boone.
Siater, Florence Rachel.....	E., H.	Rich Hill.....	Bates.
Smith, Frances Belle.....	H., M.	Louisiana.....	Pike.
Smith, Alfred Hannah.....	Fr., H., G.	Kirksville.....	Adair.
Smith, Emeline.....	L., H.	White's Store...	Howard.
Smyth, Alice Crawford.....	S.	Columbia.....	Boone.
Sprague, Eva Light.....	E., M., Ag.	California.....	Moniteau.
Starke, Lelia.....	P., H.	St. Louis City.	
Starrett, Adda Mabel.....	E., H.	Shelbyville.....	Shelby.
Statler, Minnie May.....	H.	Van Buren, Ark.	
Steele, Oliver Lee.....	G.	Ladonia.....	Audrain.
Steinheimer, Albert Arthur...	E., P.	Marshall.....	Saline.

Name.	Studies.	Postoffice.	County.
Stephenson, Rose.....	E., Fr.	Linneus	Linn.
Sterling, Harry William.....	E., P., Ag., H.	Duenweg.....	Jasper.
Stevens, Bennie.....	E.	Monroe City	Monroe.
Stewart, George Earle.....	L., H.	Merwin	Bates.
Stewart, Lorinzo D.....	H., P.	Rich Hill	Bates.
Stewart, Cora M.....	E., S.	Hot Springs, Ark.	
Stewart, Elizabeth.....	E., M.	Avalon	Livingston.
Stone, Sue Marie.....	M., Fr.	Columbia	Boone.
Stoner, Charles Augustine.....	H., E., M.	Ridgeway	Harrison.
Stumberg, Viola Ione.....	H., G.	Weldon Spring....	St. Charles.
Sturtevant, Glenna M.....	P., E.	Clearmont	Nodaway.
Summers, Nettie B.....	D.	Centralia	Boone.
Sutton, Gertrude Robertson...	E., G.	Rockport	Atchison.
Sweet, Arthur T.....	Geol., E., Histol.	Curryville	Pike.
Tate, Joseph Burton.....	E., P.	Garrett	Callaway.
Tedford, Lovie Mary	H., E.	Shelbina	Shelby.
Temple, Charles Edward.....	H., E.	Stanberry.	Gentry.
Terrell, Lizzie.....	B., C.	Moberly	Randolph.
Thomas, Myrtle	E., S.	Carthage.....	Jasper.
Thomas, Mayme.....	H., E.	Bonne Terre.....	St. Francois.
Thompson, Chas. Dugan.....	L., H.	Knobnoster.....	Johnson.
Thurman, Zula Zong	M., E.	Troy.....	Lincoln.
Tinsley, Nora Maude.....	G., Com., Fr.	Kahoka.....	Clark.
Tomlinson, Erwin Mortimer...	M.	Centralia	Boone.
Townsend, Cara Curtis.....	S., M.	Keokuk, Iowa.	
Tuttle, Floyd Wilkins.....	Gr., S.	Columbia.....	Boone.
Tyler, Allie Gertrude.....	H., E.	England, Ark.	
Urban, Fred Wagner.....	G., H.	Stewartsville	DeKalb.
Vandike, Joseph Martin.....	E., M.	Axtell.	Macon.
Vaughan, Emma Pearl.....	E., Em.	Kirkwood.....	St. Louis.
Vaetch, Otto.....	Geol.	Webb City.....	Jasper.
Viies, Charles Walter.....	Geol., E., M.	Bolivar	Polk.
Walker, George Johnson	D., M.	Monroe City.....	Monroe.
Walker, Charles Joseph.....	L., P.	Wentzville.....	St. Charles.
Wallace, Amanthus Sears. . . .	S., Hort.	Centralia	Boone.
Waller, Pocahontas.....	M., E., Ag.	Paris.....	Monroe.
Walsh, Stephen S.....	M., E.	Miami	Saline.
Walton, Stonewall Jackson....	H., E.	Troy.....	Lincoln.
Waring, Cora Cecilia.....	S.	Kansas City	Jackson.
Warner, Birdie B.....	E., P.	Appleton City....	St. Clair.
Warrick, Bertha Olive.....	L.	Kansas City	Jackson.
Watson, Malcolm Clyde.....	E., G.	Riggs.....	Boone.
Watson, Sallie.....	E., G.	Fanning.....	Crawford.
Wayman, Lillian.....	E., M.	Albany.....	Gentry.
Webster, Carl D.....	H., P., Ag.	Savannah.....	Andrew.
Weeks, Eula Adeline.....	M., E.	Rich Hill.....	Bates.
Welborn, Arthur Tarance.....	E., L., H.	Bloomfield.....	Stoddard.
Welch, Ellmore Jackson. . . .	M., E.	Musselfork.....	Chariton.
Welch, Mary Elizabeth.....	M., E.	Elsberry	Lincoln.
Welch, Howard	Em., P.	Columbia	Boone.
Wells, Lewis Payne.....	H., E.	Phelps City.....	Atchison.
Wells, Charles Abner.....	L., H.	Phelps City.....	Atchison.
Westlake, Dixie Llewellen. . . .	S.	Columbia.....	Boone.
Wharton, James LeRoy.....	D.	Columbia.....	Boone.
Wheeler, Richard Henry.....	M., H., Ag., E.	Virginia	Bates.
Whitaker, Susie.	Ag., E.	Shelbina.....	Shelby.
Whitlow, Joseph A.....	G., P.	Alberta.....	Henry.
Willhite, Benjamin F.....	Fr.	Barry.....	Platte.
Williams, David E. A. P.....	Em., Histol.	Columbia.....	Boone.
Williams, Anna.....	E.	Stoutsville.....	Monroe.
Williams, Jessie.....	Ag.	Stoutsville.....	Monroe.
Williams, Charles Allen.	M.	Springfield.....	Greene.
Williams, Ambrose	H., Com.	Bolivar	Polk.
Williams, Francis Emmett.....	H., E.	Irondale.....	Washington.
Williams, Jesse Raymond.....	Gr., L.	Noble, Ill.	
Winchester, Luther.....	S., B., Ag.	Essex.....	Stoddard.

Name.	Studies.	Postoffice.	County.
Wine, Alice.....	E., M.	Monroe City.	Monroe.
Winkelmeyer, Edwin J.	G.	St. Louis City.	
Woodbury, Charles Levi.....	M., Em.	Lawrence, <i>Kans.</i>	
Woodbury, William Hook.....	M., Fr.	Lawrence, <i>Kans.</i>	
Woodson, Aytch Perrin.....	Geol.	Kansas City.....	Jackson.
Wright, Lena F.....	H., E., M.	Appleton City.....	St. Clair.
Wright, Edward F.....	P., E.	Preston.....	Hickory.
Young, Grace Fletcher.....	H., M.	Kirkwood.....	St. Louis.
Yunker, Blanche.. ..	H., G.	Louisiana.....	Pike.

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A. AT AVA, MISSOURI.

Name.	Studies.	Postoffice.	County.
Abel, Anna	E., M.	Sprague	Bates.
Abel, Clara M.	L., B.	Metz.....	Vernon.
Amas, Nannie.....	E., M.	Ava.....	Douglas.
Arbogast, Bertha.....	E., H.	Thomasville	Howell.
Bridges, Silas Arthur.....	E., M.	Richville.....	Douglas.
Bruton, William Cantrell.....	E., H.		
Burchell, John T.	E., M.	Ava.....	Douglas.
Burdette, Francis Edward.....	E., M.	Ava.....	Douglas.
Burke, J. Henry.	E., M.	Filer	Douglas.
Clinkingbeard, Nancy.....	E., M.	Arno.....	Douglas.
Cowles, Kate	L., M.	Beaver.....	Douglas.
Daily, Cora Ethel.....	E., B.	Beaver.....	Douglas.
Dameron, Clarence W.....	M.	Squires	Douglas.
Davis, Effie M.....	M., B.	Ava.....	Douglas.
Davis, Ethel.....	H., M.	Ava.....	Douglas.
Davis, George Felda.....	M., B.	Ava.....	Douglas.
Davis, Minerva	B.	Ava.....	Douglas.
Ellis, Onie.....	E., M.	Beaver.....	Douglas.
Givans, Audrain.....	E., M.	Arno.....	Douglas.
Givans, Lula.....	E., M.	Arno.....	Douglas.
Grasham, Mary Ellen.....	E., M.	Ava.....	Douglas.
Hailey, Effie May.....	E., B.	Ava.....	Douglas.
Hartley, James Walter.....	E., M.	Arden.....	Douglas.
Hemrick, Orlando P. A.....	E., M.	Moody.....	Howell.
Hensley, Jessie Albert.....	E., H.	Odin.....	Wright.
Herman, George W.....	E., B.	Cedar Gap.....	Wright.
Holt, Pearl	E., M., B.	Ava.....	Douglas.
Huntsman, Arlo Biddle	H., M.	Sedan.....	Douglas.
Hylton, Joseph A	E., L., B.	Stroud, <i>Okla.</i>	
Hylton, Inez M	L., B.	Ava.....	Douglas.
Inman, Ella Ada.....	E., M.	Ava.....	Douglas.
Inman, Chas. Samuel.....	E., M.	Ava.....	Douglas.
James, Mackey C.....	H., M.	Ava.....	Douglas.
John, Rosa.....	E., M.	Olathe	Douglas.
Jones, William Monroe.....	E., H.	Competition	Laclede.
Judd, Laura Belle.....	H., M.	Topaz.....	Douglas.
Kay, Carrie Ethel.....	E., B.	Ava.....	Douglas.
Knight, Elmer J.....	H., M.	Ava.....	Douglas.
Landers, Ivey LeRoy.....	M.	Ava.....	Douglas.
Landers, Ida.....	M., B.	Ava.....	Douglas.
Lawson, Elmer	E., M.	Idumea.....	Douglas.
Martin, Harry John.....	E., M.	Ava.....	Douglas.
Martin, Lottie.....	E., M.	Ava.....	Douglas.
Mercer, R. Pearl.....	E., M.	Ava.....	Douglas.
Mercer, Coral Frantz.....	M.	Ava.....	Douglas.
Mitchell, Mattie Ellen.....	E., B.	Pansy.....	Douglas.
Mitchell, Jessie A.....	E., B.	Pansy.....	Douglas.

Name.	Studies.	Postoffice.	County.
Mitchell, Curtis W.....	E., M.	Pansy.....	Douglas.
McGrath, John T.	E., M.	Ava.....	Douglas.
McHolland, Orange Stanley...	M., B.	Smallett.....	Douglas.
Nash, Ada May.....	E., H.	Cherry.....	Douglas.
Neiman, Susie Pearl.....	L., B.	Arno.....	Douglas.
Nunn, Nellie.....	E., M.	Ava.....	Douglas.
Osborn, Sarah.....	E., M.	Ava.....	Douglas.
Osborn, Maude E.....	E., M.	Ava.....	Douglas.
Paul, Luetta.....	E., M.	Drury.....	Douglas.
Pease, Walter A.....	E., B.	Dora.....	Douglas.
Redman, Jesse W.....	E., M.	Rail.....	Wright.
Richardson, Lula May.....	E., M.	Beaver.....	Douglas.
Richardson, Alla Marcell.....	E., M.	Beaver.....	Douglas.
Robertson, Elva.....	E., B.	Palmyra, <i>Tenn.</i>	
Ross, Jesse Newton.....	E., M.	Rockbridge.....	Ozark.
Shelton, Henry Clay.....	E., H.	Noble.....	Ozark.
Sloan, George D.....	M., H.	Eminence.....	Shannon.
Smallwood, Francis M.....	E., M.	Topaz.....	Douglas.
Smith, Kirby J.....	E., M.	Arden.....	Douglas.
Stephenson, Clara.....	H., B.	Ava.....	Douglas.
Stewart, Elizabeth.....	H., B.	Norwood.....	Wright.
Surguine, Martha.....	H., B.	Ava.....	Douglas.
Surguine, Edward J.....	E.	Ava.....	Douglas.
Surguine, Clark.....	E., M.	Ava.....	Douglas.
Thompson, Jas. Joshua.....	E., M.	Ava.....	Douglas.
Turner, Jas. Edward.....	L., M.	Arno.....	Douglas.
Turner, William L.....	H., M.	Arno.....	Douglas.
Waters, Nathan Richard.....	E.	Ava.....	Douglas.
Watters, Fred.....	E., B.	Arno.....	Douglas.
Watters, Monroe.....	E., B.	Arno.....	Douglas.
Williamson, William, Jr.....	E., M.	Ava.....	Douglas.
Wilson, Henry S.....	E., L., B.	Ava.....	Douglas.
Wilson, Mrs. Belle.....	L.	Ava.....	Douglas.
Wilson, George B.....	E., B.	Roy.....	Douglas.
Wilson, David Elmer.....	E., B.	Roy.....	Douglas.
Woodard, Sparlan F.....	B.	Rome.....	Douglas.

B. AT BETHANY, MISSOURI.

Name.	Studies.	Postoffice.	County.
Baldwin, Lucile.....	E., H.	Martinsville.....	Harrison.
Barlow, Mabel.....	L.	Bethany.....	Harrison.
Beeney, Owen Laurel.....	E., P.	Akron.....	Harrison.
Bolar, Worth.....	M., E.	Bethany.....	Harrison.
Bondurant, Maude.....	H.	Bethany.....	Harrison.
Bradley, Walter F.....	L., E.	Bethany.....	Harrison.
Buck, Cora E.....	M., E.	Bethany.....	Harrison.
Burg, Kittie Eva.....	E.	Bethany.....	Harrison.
Bush, Josie.....	E., H.	Cainsville.....	Harrison.
Canaday, Samuel C.....	M., E.	Eagleville.....	Harrison.
Cave, Mary Elizabeth.....	M., E.	Bethany.....	Harrison.
Courtney, Ona.....	M., E.	Bethany.....	Harrison.
Cruzan, Archelaus Albert.....	P., E.	Bethany.....	Harrison.
Dawson, Lonel Raymond.....	M., E.	Gilman City.....	Harrison.
Deckard, Artie.....	M., E.	Eagleville.....	Harrison.
Deckard, Maude.....	M., E.	Eagleville.....	Harrison.
Frisby, Kitty.....	M., E.	Thomas.....	Harrison.
Gillidett, Everett Gerald.....	L.	Bethany.....	Harrison.
Glenn, Laura Alice.....	M., E.	Martinsville.....	Harrison.

Name.	Studies.	Postoffice.	County.
Haroff, Susan Caroline....	M., E.	Andover.....	Harrison.
Harrison, Susie.....	H., E.	Bethany.....	Harrison.
Hefner, Frank.....	E., H.	Blythedale.....	Harrison.
Howe, Josie.....	M., E.	Bethany.....	Harrison.
Hunter, Luna.....	M., E.	Martinsville.....	Harrison.
Hutton, Mabel.....	M., E.	Allendale.....	Worth.
Kavanaugh, Roscoe.....	E., P.	New Hampton....	Harrison.
Keyes, Charlie Townsend....	M., E.	Bethany.....	Harrison.
Kinkade, Mary.....	M., E.	Bethany.....	Harrison.
Kintner, Beatrice.....	E., P.	Bethany.....	Harrison.
Lawhead, Forest.....	M., E.	Cainsville.....	Harrison.
Madden, Jesse.....	M., E.	Bethany.....	Harrison.
Magee, Essie.....	E.	New Hampton....	Harrison.
Martin, Fanny Elizabeth....	E.	Bethany.....	Harrison.
Milholland, Alva Curtis.....	M., F.	Bethany.....	Harrison.
Miner, Shirley Gardner.....	E., P.	Bethany.....	Harrison.
Monson, Thomas Carl.....	M., E.	Bethany.....	Harrison.
Morgan, Edith.....	E., H.	Bethany.....	Harrison.
Murray, Jessie.....	L.	Martinsville.....	Harrison.
McCollum, Samuel B.....	H., P.	Bethany.....	Harrison.
McDole, John Freeman.....	L., E.	Parnell.....	Nodaway.
Nally, Clinton.....	L., H.	Bethany.....	Harrison.
Nally, Cliff.....	M., E.	Cainsville.....	Harrison.
Nelson, Margaret May.....	E., H.	Bethany.....	Harrison.
Neville, Lillian Claire.....	E., H.	St. Joseph.....	Buchanan.
Nickerson, Raleigh.....	M., E.	Bethany.....	Harrison.
Noll, Katherine Elizabeth....	E., H.	Bethany.....	Harrison.
Papineau, Turah.....	E., P.	Bethany.....	Harrison.
Pilcher, Myrtle Olive.....	M., H.	Bolton.....	Harrison.
Redman, Susie M.....	M., E.	Stanberry.....	Gentry.
Rhea, Frances.....	E., H.	Mt. Moriah.....	Harrison.
Rimmer, Jesse Calvin.....	M., E.	Martinsville.....	Harrison.
Roberts, Wilford Ray.....	E., H.	Allendale.....	Worth.
Rogers, Roy.....	M., P.	Cainsville.....	Harrison.
Ross, Charlie Clifton.....	M., E.	Bethany.....	Harrison.
Ross, Elijah Carter.....	M., E.	Martinsville.....	Harrison.
Ross, John Hugh.....	E., H.	Martinsville.....	Harrison.
Saffer, Fannie Angeline.....	M., E.	Bethany.....	Harrison.
Schiefelbusch, Otilia.....	M., E.	Andover.....	Harrison.
Scott, Marie.....	M., E.	Martinsville.....	Harrison.
Sigler, Amy.....	M., E.	Ridgeway.....	Harrison.
Skinner, Stella.....	L., H.	Bethany.....	Harrison.
Smith, Robert W.....	E., P.	King City.....	Gentry.
Snyder, Bessie E.....	M., H.	Bethany.....	Harrison.
Sutton, Nellie.....	L., H.	Bethany.....	Harrison.
Sutton, Samuel G.....	M., E.	Happy Valley....	Harrison.
Tull, Anna Buren.....	L.	Whitesville.....	Andrew.
Vandivert, Bessie Agnes....	E., H.	Bethany.....	Harrison.
VanHoover, Porter Horton....	M., E.	Martinsville.....	Harrison.
Wightman, Perrin Gladstone..	L., P.	Bethany.....	Harrison.
Wilkinson, Della.....	M., E.	Allendale.....	Worth.
Wilson, Garland.....	E., H.	Bethany.....	Harrison.
Woodward, Earl.....	M., E.	Cainsville.....	Harrison.

SUMMARY

I. Enrollment by Departments.

I. GRADUATES	50		
Total	49		
II. ACADEMIC:			
Seniors	74	(b) <i>Mechanic Arts</i>	51
Juniors	84	(c) <i>Engineering.</i>	
Sophomores	123	Graduate	7
Freshmen	159	Seniors	14
Specials	66	Juniors	36
Total	506	Sophomores	56
		Freshmen	67
		Specials	4
III. EDUCATION:	178	Total	184
IV. LAW:		(d) <i>Household Economics.</i>	26
Graduate	2	VIII. SCHOOL OF MINES (Rolla):	
Seniors	72	Graduate	11
First Year	60	Seniors	13
Specials	9	Juniors	20
Total	143	Sophomores	54
V. MEDICAL:	90	Freshmen	72
VI. MILITARY SCIENCE AND TACTICS	251	Special	22
VII. A. AND M. COLLEGE:		Total	192
(a) <i>Agriculture.</i>			
Graduate	2		
Fourth Year	4		
Third Year	6		
Second Year	11		
First Year	23		
Specials	13		
Short Course (Agric.)	25		
Short Course (Hort.)	4		
Short Course (Dairy)	5		
Summer School	57		
Total	145		

II. Enrollment in Courses.

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(a) <i>Academic</i> (Columbia).	(c) (Rolla).
A. B. Course 440	Mining Engineering ... 139
Special 66	Civil Engineering 10
(b) <i>Engineering</i> (Columbia).	Chemistry & Metallurgy 19
Civil Engineering.. ... 88	General Science 10
Mechanical Engineering. 34	Electricity 2
Electrical Engineering . 62	Unclassified 12
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III. Students Working in Gymnasium.

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Men 330	Women 121
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IV. Young Men and Young Women.

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(a) <i>Columbia</i> .	<i>Columbia</i> .
Regular Session.	Summer School:
Men 881	Men 250
Women 238	Women 257
(b) <i>Rolla</i> .	
Men 183	Women 9
Total young men...1314	Total young women.. 504
Counted twice 98	Counted twice 49
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V. Total Enrollment.

Graduate Students	49
Academic	506
Law	143
Medical	90
Department of Education	178
A. & M. College. 1. Agriculture and Mechanic Arts.....	196
2. Engineering.....	184
3. Household Economics	26..... 406
School of Mines	192
Summer School	507
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Total	2071
Names counted twice	400
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Total number of individual students.....	1671
Total number at Columbia.....	1479
Total number at Rolla.....	192

VI. Counties Represented in the University at Columbia.

Adair	9	Daviess	7
Andrew	4	Dekalb	1
Atchison	9	Dent	1
Audrain	18	Dunklin	4
Barry	3	Franklin	4
Barton	5	Gasconade	2
Bates	7	Gentry	12
Benton	5	Greene	9
Bollinger	2	Grundy	10
Boone	145	Harrison	10
Buchanan	14	Henry	15
Butler	4	Hickory	2
Caldwell	7	Holt	11
Callaway	5	Howard	6
Cape Girardeau	4	Howell	1
Carroll	10	Jackson	54
Cass	10	Jasper	26
Cedar	4	Jefferson	2
Chariton	4	Johnson	9
Christian	1	Knox.....	3
Clark	3	Laclede..	1
Clay	14	Lafayette	7
Clinton	10	Lawrence	5
Cole....	3	Lewis	9
Cooper	9	Lincoln	9
Crawford	2	Linn	12
Dade	7	Livingston	12
Dallas	2	McDonald	1

Macon	12	Randolph	6
Madison.....	1	Ray	7
Maries	2	Ripley	2
Marion	14	St. Charles.....	4
Mercer	4	St. Clair.....	6
Miller	3	St. Francois	7
Mississippi	2	Ste. Genevieve.....	1
Moniteau	6	St. Louis	10
Monroe.....	16	Saline	20
Montgomery	2	Schuyler	7
New Madrid	1	Scotland	1
Newton	4	Scott	2
Nodaway	13	Shannon	1
Osage	4	Shelby	4
Ozark	1	Stoddard	2
Perry	4	Sullivan	2
Pettis	25	Texas	4
Pike	3	Vernon	8
Platte....	5	Washington	2
Polk	2	Wayne	1
Pulaski	1	Worth	2
Putnam	6	Wright	6
Ralls.. ..	8	City of St. Louis.....	27
Number of counties represented (including city of St. Louis)....			102
Number of counties not represented.....			13

VII. States, Territories and Foreign Countries.

Alabama	1	New York	9
Arkansas	7	North Carolina	1
California	3	Ohio	10
Colorado	5	Oregon....	1
Georgia	1	Oklahoma	4
Idaho	2	Pennsylvania	8
Illinois	14	South Dakota	1
Indiana	2	Tennessee	1
Iowa....	14	Texas	2
Kansas	15	Vermont	1
Kentucky	7	Virginia	3
Louisiana	4	West Virglnia	1
Maine	1	Wisconsin	2
Massachusetts	2	New Mexico	1
Michigan....	4	Cuba	1
Mississippi	3	Puerto Rico	1
Missouri.. ..	1335	District of Columbia.....	1
Montana	2	Argentine Republic	2
Nebraska	2	Japan	2
New Hampshire	1	China	1

Total represented at Columbia..... 40

GRADUATES OF 1901

(a) COLUMBIA, MISSOURI.

I. CERTIFICATES.

Department of Military Science and Tactics.

Walter Garton Davis, <i>cum laude</i> .	James Moore Haw.
Roy Dimmitt, <i>cum laude</i> .	George Ludwig Hax, Jr.
Frazer Crosswell Hilder, <i>cum laude</i> .	Walter A. Higbee.
Frank W. Sanson, <i>cum laude</i> .	Wallace Earl Hulse.
Charles Levi Woodbury, <i>cum laude</i> .	Frederick Otto Kaps.
Robert Turner Abernathy.	Henry Kleinschmidt.
Wallace Alexander.	Albert Knabe.
Everett Elmo Biggs.	Frank Robert Knight.
William Thomas Bishop.	Walter Frank Koken.
Lawrence Bothwell.	John Solomon Montgomery.
Charles Francis Clark.	Mark Austin McGruder.
Matthew Lee Coffey.	William Herbert Olshausen.
William Tyler Coleman.	Frank Emil Pernoud.
David Andrew Cripps.	Albert Newton Peters.
Andrew Monroe Crouch.	Horace Reed.
Job Marcus Doughty.	George Walter Ridgeway.
Neal McClain Draper.	Edward Everet Robinson.
Charles Clifford DuBois.	David Otto Row.
James Oliver Erwin.	George Shields Shepherd.
Ross Elmer Feaster.	Asa George Steele.
Ralph Tilden Finley.	Charlie Dugan Steele.
James Richie Fountain.	Louis George Tegtmeyer.
Everett Freeze.	Malcolm Clyde Watson.
William Hammack Goodson.	Albert Francis Willier.
Ralph Scott Hamilton.	Herbert Spencer Woods.
Albert Sidney Harris.	Aytch Perrin Woodson.
	George Stoddy Yant.
	Edward Zorn.

Department of Education.

(Two Year Certificate.)

Roger Gordon Alexander.	Robert Hodge Locke.
Everett Elmo Biggs.	Ella Lee Moulton.
James Paul Biggs.	Thomas Orrin Ramsey.
Harley Earl Howe.	George Walter Ridgeway.

Diploma and Life Certificate.

Franklin Miller, <i>cum laude</i> .	Cornelia Pieretta Brossard
Amanda Fredericka Becker.	Roy Dimmitt.
Virginia Cordelia Bell.	Rosalie Gerig.

Andrew Gaston Gladney.
 Charles Arthur Greene.
 Fanny Bell Hatcher.
 Ruth Amanda Hitch.
 Therese Bertha Hospes.
 Alfa Jane Jackson.
 Charles Aaron Jenkins.
 Samuel Kroesch.

Mary Helen Lindsey.
 Robert Fields Nichols.
 Lulu Edith Nichols.
 Edith Shipley.
 Asa George Steele.
 Joseph Summers.
 Ernest Tate.

II. DEGREES.

School of Engineering.

1. *Degree of Bachelor of Science in Civil Engineering (B. S.).*

Garland Carr Broadhead, Jr.
 (A. B., U. of Mo., '94.)
 Isaac Benjamin Cooper.
 Leslie Monroe Fry.

Roy Carl Gans.
 Joe Powers.
 Edward Lewis Shepard.

2. *Degree of Bachelor of Science in Electrical Engineering (B. S.).*

Walter Smalley Cope.
 Lenoir Wilkes O'Rear.

Edwin Dwight Smith.

Department of Medicine.

Degree of Doctor of Medicine (M. D.).

Charles Leonard Parkhurst, *cum laude*.
 (B. S., Univ. of Mo., 1898.)
 Harry Herr Smiley, *cum laude*.
 (A. B., Westminster College.)
 William Henry Turner, *cum laude*.
 (B. S., Univ. of Mo., 1898.)

Charles Willett Austene.
 William Thomas Bishop.
 Charles Claude Guthrie.
 Horace Reed.
 Robert Roy Robinson.
 Morris Daniels Silver.
 Carl Miller Sneed.
 Benjamin Warren Vaughn.

Department of Law.

Degree of Bachelor of Laws (LL. B.).

Nathaniel Smith Brown, *cum laude*.
 Homer Judson Bain.
 Hugh Glenn Bass.
 Elisha Franklin Camron, Jr.
 Charles Francis Clark.
 Ernest Evans Davidson.
 Walton Garton Davis.
 Watt Burress Dawson.
 Robert Sidney Douglass.
 Frank Delbert Goul.

John Chappellear Hall.
 John Bennett Harvey.
 James Moore Haw.
 Charles Leonard Henson.
 Rufus Lee Higginbotham.
 Giboney Houck.
 Arthur Jennings.
 Barlytte Marshall Lockwood.
 William Cardwell Lucas.
 Charles Stewart Marsh.
 Clarence A. Martin.

Joseph Frank Meador.
 Don C. Meyer.
 George Prewitt Moore.
 George Herbert Moore.
 Perry McCullough.
 Mark Austin McGruder.
 Lewis Irvin O'Briant.
 Shelby Edmond Osborne.

Flavius Josephus Rice.
 Joseph Erasmus Rockwood.
 DeWalker Smith.
 Hudson Valentine Smoot.
 Thornton Rowe Snyder.
 Stewart Barton Sturgis.
 Clyde Williams.
 George Francis Woodward.

College of Agriculture and Mechanic Arts.

1. *Degree of Bachelor of Agriculture (B. Agr.).*

Mary Dixie Dix.
 Walter Lafayette Howard.

Claude Leake Willoughby.

2. *Degree of Bachelor of Science in Agriculture (B. S. in Agr.).*

Walter Lafayette Howard.

Academic Department.

1. *Degree of Bachelor of Arts (A. B.).*

Franklin Miller, *cum laude*.
 Hettie Marguerite Anthony.
 Frances Elizabeth Bedford.
 Cornelia Pieretta Brossard.
 Ethel Ardelia Dockery.
 Louis Stevens Ganson.
 Benajah Pitts Gentry.
 Talitha Jennie Green.
 Fanny Bell Hatcher.
 William Frederic Hauhart.
 Ruth Amanda Hitch.
 Giboney Houck.
 Alfa Jane Jackson.
 Louis Ingold.

Charles Aaron Jenkins.
 Charles Oscar Jenkins.
 William Sherman Johnson.
 Samuel Kroesch.
 Rolla McIntire.
 Allen McReynolds.
 William Tell Merrill.
 William Dunn Moore.
 Robert Fields Nichols.
 Eugenia Frances Nolen.
 Robert Burett Oliver, Jr.
 Ernest Tate.
 Clyde Williams.

2. *Degree of Bachelor of Science (B. S.).*

Amanda Fredericka Becker.
 Virginia Cordelia Bell.
 Elexious Thompson Bell.
 Louise Leah Cauthorn.
 Roy Dimmitt.

Mary Helen Lindsey.
 Pleasant Pomeroy Nesbitt.
 Peter Potter.
 Asa George Steele.

3. *Degree of Master of Arts (A. M.).*

Clarence Eugene Boyd.
 (A. B., Woodford College, '96.)
 Norman Freudenberger.
 (A. B., University of Mo., '00.)
 Rosalie Gerig.
 (A. B., University of Mo., '00.)
 Andrew Gaston Gladney.
 (B. S., University of Mo., '00.)
 Charles Arthur Greene.
 (A. B., University of Mo., '00.)

Lulu Edith Nichols.
 (B. L., University of Mo., '00.)
 Mary Isabelle Steele.
 (B. S., University of Mo., '00.)
 Joseph Summers.
 (A. B., William Jewell College,
 '99.)
 Charles Alfred Turrell.
 (B. S., University of Neb., '97.)

4. *Honorary Degree of Doctor of Laws (LL. D.).*

Woodson Moss.
 (M. D., University of Mo., '74.)

III. PRIZES, MEDALS, SCHOLARSHIPS, AND HONORS.

The Dachsel Prize (Engineering). (Not awarded.)

The Prize Essays, Department of Law—*Spendthrift Trusts*.

First (The Edward M. Thompson American and English Encyclopedia of Law). Nathaniel Smith Brown.

Second. Elisha Franklin Camron, Jr.

The William J. Bryan Medal (Political Science). Allen McReynolds.

The Laws Medal (Astronomy). (Not Awarded.)

The McAnally Medal (English). (Not Awarded.)

The Military Cup. Company D., Capt. Allen McReynolds.

The Military Medal. Pte. Frazer Crosswell Hilder.

The Marksmanship Medal. Capt. Elisha Franklin Camron, Jr.

The Stephens Medal (Oratory). Harry Herr Smiley.

The James S. Rollins Scholarship, Department of Medicine. (Not Awarded.)

The James S. Rollins Scholarship, Department of Law. Stonewall Jackson Walton.

The James S. Rollins Scholarship, College of Agriculture and Mechanic Arts (School of Agriculture). Albert Early Parkhurst.

The James S. Rollins Scholarship, College of Agriculture and Mechanic Arts (School of Engineering). John McClure Salmon.

The James S. Rollins Scholarship, Academic Department, A. B. Richard Henry Jesse, Jr.

The James S. Rollins Scholarship, Academic Department, B. S. Benjamin Franklin Willhite.

Valedictorian in the Medical Department. Harry Herr Smiley.

Valedictorian in the Law Department. Nathaniel Smith Brown.

Valedictorian in the College of Agriculture and Mechanic Arts
(School of Engineering). Walter Smalley Cope.

Valedictorian in the College of Agriculture and Mechanic Arts
(School of Agriculture). Walter Lafayette Howard.

Valedictorian in the Department of Education. Franklin Miller.

Valedictorian in the Academic Department. Franklin Miller.

(b) ROLLA, MISSOURI.

DEGREES.

Engineer of Mines.

Theodore Stuart DeLay.

Civil Engineer.

Thompson Alexander.

Bachelor of Science (Mining Engineering).

DeNard Wilson Buckby.

James Clark Draper.

Charles Albert Fach.

Frederick Richard Koeberlin.

Herbert Russell Hanley.

Walbridge Henry Powell.

Rulof Theodore Rolufs.

Ignatius Joseph Henry Stauber.

George Woodhall, Jr.

Bachelor of Science (Civil Engineering).

Isaac Peter Frazier, B. S.

Joseph Clarence Watkins.

Albert Spengler.

Bachelor of Science (General Science).

Frederick Ragland Cowles.

Leon Ellis Garrett.

Bachelor of Science (Chemistry and Metallurgy).

George Lewis Olmsted.

Diploma in Academic Department.

Ethel May Scott.

CERTIFICATES.

Special Course in Electricity.

Cornelius Mark Daily.

Charles Mellor.

Lewis Lawrence Scott.

Special Course in Assaying and Chemical Analysis.

Pasha Benjamin Leivy.

Lewis Joseph Christie.

Special Course in Surveying.

Pasha Benjamin Leivy.

Charles Hoyle.

Edward Lewis Barber.

Royal Sylvester Webster.

Ralph Augustus Conrads.

Ralph Waldo Marston.

Special Course in Mining.

Charles Hoyle.

APPENDIX

Summer Session of the University

The Summer Session will begin Monday, June 2, and close Friday, August 30.

Courses will be given in Agriculture, Biology, Chemistry, English, French, German, Greek, History, Horticulture, Latin, Mathematics, Physics, and Sloyd.

All of the courses, except those in Horticulture, will begin at the opening of the first term on June 2. The course in Horticulture will begin on July 17. All the courses except those in Agriculture, Chemistry and Horticulture, will continue for the entire session, or up to August 30. The courses in Agriculture and Chemistry will be given during the first term only. Students who enter either term should register upon the opening day of that term. This is absolutely necessary when the student expects to enter courses which he has not pursued before.

The lecture period will be ninety minutes, and no student will be permitted to take more than two courses.

CHARACTER OF THE COURSES.

The courses are of two kinds: (1) Those planned to meet the wants of teachers in High Schools and Academies. (2) Those planned for teachers and other persons who desire to spend a portion of the vacation period in systematic work.

Teachers in the secondary schools will find here an excellent opportunity of reviewing subjects that they teach and of gaining suggestions of new methods, or an opportunity of obtaining University instruction, with credit therefor upon the books of the University.

Statistics show that boards of education are demanding of teachers year by year greater efficiency and better scholarship. The Summer Session of the University presents to the teachers of Missouri an opportunity to meet this demand, and at a very small cost.

TERMS OF ADMISSION.

There will be no formal examinations for admission. Students will be admitted to such courses as they are prepared for. Such students as

desire University credit for their work must meet the entrance requirements or enter as special students.

REGISTRATION

Students should present themselves for registration at room 3, Academic Hall, on Monday, June 2, between the hours of 8 a. m. and 4 p. m. Lectures will begin at 8 o'clock on June 3. It is important that every student be present on the opening day of the session.

EXAMINATIONS

At the close of each term stated examinations for those who desire credit will be held in the several courses. The State Superintendent of Public Schools will hold an examination for State certificates at the close of the first term, July 17 and 18. He will not hold an examination at the close of the second term.

CREDIT FOR COURSES IN SUMMER SESSION

The number of hours' credit given for each course is stated in connection with the outline of the courses given later in this announcement. The maximum credit that the student may receive for one term's work is six (6) hours; for two terms' work, twelve (12) hours.

Students must attend five-sixths of a term to receive six hours' University credit and two-thirds of a term to receive three hours' credit. Students who attend less than two-thirds of a term will receive no credit whatsoever.

ACCEPTANCE OF GRADES.

A law enacted by the Forty-first General Assembly provides for the acceptance of the grades made in the Summer Session, as follows:

Grades made in the summer terms of the State educational institutions and in such other summer schools as may be approved by the State Board of Education shall be accepted by the State Superintendent and County Boards in lieu of examination in such subjects or parts of subjects outlined by the State Board. (Section 9666.)

The State Board has announced that no pupil shall be given credit in grades for teachers' certificates who has not attended the summer school giving the grades at least six-sevenths of the term.

The grades made in this school by an experienced teacher will be accepted by the State Superintendent of Public Schools in lieu of an examination on such subjects for State certificates.

EXPENSES.

The fee for admission is \$5.00 for the session of twelve weeks or any part thereof. This is payable upon entrance to the treasurer of the University. Each student who takes laboratory work in Agriculture, Horticulture, Physics, Chemistry, Biology or Sloyd is required to make a deposit of \$5.00 with the Proctor of the University to cover laboratory fee of \$2.50, and damages or loss of University property. The deposit is \$5.00 for each laboratory, and the fee \$2.50 for each laboratory. Students who take both Agriculture and Horticulture are required to make only one deposit and to pay but one laboratory fee.

Good board, including room and service, may be had in private families at from \$3.00 to \$4.50 per week. If the students choose to organize themselves into a club, the expense of living may be much reduced. Rooms may be rented in the University Boarding Club at \$3.00 a term, and in the Agricultural Boarding Club at \$2.00 a term of six weeks. All students renting rooms in a club house are required to make a deposit of \$3.00 to cover damages or loss of University property. Each room is furnished with a plain bedstead, table and two chairs. If two persons occupy one room the other furniture absolutely necessary may be bought or rented for the summer for ten or twelve dollars. Table board in these clubs can easily be brought within \$2.00 a week.

The laboratory deposit and the room deposit will be refunded at the close of the students' course, less the amount deducted for laboratory fee, and for loss of University property or damage thereto.

RAILROAD RATES IN MISSOURI.

For two summers all the railroads of the State have granted a rate of one and a third to students of the Summer Session, and the same rate will no doubt be granted for the summer of 1902. The sale of the reduced fare tickets will be limited to the first week of each term, viz., June 2, 3, 4, 5, 6, 7, 8, and July 16, 17, 18, 19, 20, 21, 22. Such tickets will be good for return passage up to September 1st. Tickets should be bought from starting point through to Columbia and not to junction points. A certificate (not a receipt) should be taken from the railroad agent at starting point. This certificate will show the name of the purchaser and the amount paid for the ticket. This certificate, when signed by J. C. Jones, Director of the Summer Session, will entitle the holder to purchase a return ticket at one-third fare.

RAILROAD RATES OUTSIDE OF MISSOURI

The Missouri, Kansas and Texas Railway System has granted a rate of a fare and one-third for the round trip on the certificate plan, from points in Kansas, Indian Territory and Texas. Tickets will be sold on June 1, 2, 3, 4, 5, 6, 7, and on July 15, 16, 17, 18, 19, 20, 21. Application has been made to Western Passenger Association for same rate. Persons in territory of this Association, who contemplate attending the Summer Session should write to the Director after May 1.

Courses in Detail

1. AGRICULTURE.

(First Term Only.)

Professor MUMFORD.

s1. Soils and Crops.

2. BIOLOGY.

†Professor GRIFFIN; Professor JACKSON.

First Term.

s1. General Biology.

s2. Embryology of Vertebrates.

Second Term.

s1. General Biology.

s3. Histology.

3. CHEMISTRY.

(First Term Only.)

Professor BROWN.

s1. General Inorganic Chemistry.

s2. Qualitative Chemical Analysis.

4. ENGLISH.

Professor ALLEN; Assistant Professor BELDEN.

First Term.

s1. English Literature.

s2. Anglo-Saxon.

†Instructor in Biology, Western Reserve University.

Second Term.

- s1. Continuation of Course s1 above.
- s2. Rhetoric and Composition.

5. FRENCH.

Professor WEEKS ; Assistant Professor BASSETT.

First Term.

- s1. Elementary French.
- s2. Advanced French.

Second Term.

The work of the second term will be a continuation of courses s1 and s2 above.

6. GERMAN.

†Professor GRUMMANN.

First Term.

- s1. Elementary German.
- s2. Goethe's Iphigenia and Tasso.

Second Term.

- s1. Continuation of course s1 above.
- s3. Goethe's Faust, Part I.

7. GREEK.

Professor ANDERSON.

First Term.

- s1. Elementary Greek. White's First Greek Book.
- s2. Xenophon's Anabasis. Harper and Wallace.
- s3. Selected Dialogues of Plato.

Second Term.

Continuation of the courses mentioned above.

8. HISTORY.

Professor LOEB ; ‡Professor VIOLETTE.

First Term.

- s1. General History.
- s2. American History.

†Adjunct Professor of Germanic Languages, University of Nebraska.

‡Professor of History, Kirksville Normal School.

Second Term.

The work of the second term will be a continuation of courses s1 and s2 above.

9. HORTICULTURE.

(Second Term Only.)

Acting Professor JOHNSON.

1. Plant studies with reference to Horticulture.

10. LATIN.

†Professor WALKER; ‡Professor FOUSHEE.

First Term.

- s1. Vergil.
- s2. Cicero, De Senectute.

Second Term.

- s3. Pliny's Letters.
- s4. Catullus and Horace.

11. MATHEMATICS.

Professor FELLOWS; Assistant Professor DEFOE.

First Term.

- s1. Trigonometry.
- s2. Analytic Geometry.
- s3. Calculus.

Second Term.

- s4. Advanced Algebra.
- s5. Calculus.
- s6. Theory of equations.

12. PHYSICS.

Professor LIPSCOMB; Assistant Professor STEWART.

First Term.

- s1. Elementary Physics, designed especially for teachers.
- s2. Mechanics and Heat.

†Professor of Latin, University of Kansas. ‡Assistant Professor of Latin, Richmond College (Va.).

Second Term.

- s1. Continuation of course s1 as described above.
- s2. Light and Electricity and Magnetism. A knowledge of Trigonometry is necessary for entrance to this course.

13. SLOYD.

Mr. SMITH.

First Term.

- s1. Card-board and Knife Work.

Second Term.

- s2. Bench-work.

For further information in regard to the Summer Session, address,

J. C. JONES, Director,
Columbia, Missouri.

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